THE CULTIVATOR.

THIRD — To Improve the Soil and the Mind. — SERIES.

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The Twenty-Fourth Year of the Cultivator.

The improvement going on among Farmers if unheralded by sudden and startling triumphs, is yet, as we believe, sure and constant. The more they read, the more they become convinced of its beneficial results, and the more it will take to satisfy their wants. Farmers have now a literature of their own—at once a medium between themselves for mutual consultation—a channel of information from other sources besides the farm—and a vehicle for the dissemination of all rural news—a record of sales and fairs, and a note-book of every passing event in its bearings to the farmer and his occupation. It not only appeals thus intimately to his most vital interests, but is strongly promotive directly and indirectly, of the progress and prosperity of the community in which he dwells. The present generation raises better crops, the next finds a better soil; the father is led to think, the child to study yet more deeply; the social standing of the agriculturist is gradually elevated as he makes his business more and more one of the head as well as the hand, as he betters his own circumstances and is led to enterprise and energy both in private and public affairs.

It is unnecessary to say here how high a place the friends of THE CULTIVATOR may properly claim for it, as a cause and means of Agricultural advancement. We should be unwilling to discredit the testimony on all sides afforded, that every number issued has been at least one seed sown towards a result of good. In now entering upon the Fifth Volume of its Third Series, it is no more than due to ourselves to solicit the assistance of its friends in securing for the new year as wide a circulation as possible.

As is generally known, the CULTIVATOR is composed of extracts from the columns of the *Country Gentleman*, and we thus have a wide field from which to make the most pithy and practical selections out of a correspondence of unequalled extent, and are enabled to secure in every number the discussion of such a range of subjects, and the teachings of so wide and varied experience, that no farmer can refer to it without finding something instructive and profitable for himself. The united income of the two publications also admits of our spending far more to secure their excellence, than could be afforded on either separately; and we are therefore not afraid to recommend them severally as the best weekly and monthly Agricultural papers in the Union. Take for example

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Mistaken Reasoning.

Nothing is more common than the practice of forming false opinions from insufficient data. It is a fruitful source of all the differences existing on various subjects in agriculture.

A single trial may be followed by certain effects. They may be accidental, and not occur again; or they may often occur, and yet have no connexion with the supposed cause. A solitary proof of this sort should never be received as anything more a suggestion for further trial. If, on being repeated, the same effect follows, the probability is increased; but it is only by many trials under all possible circumstances, that an indisputable connexion between cause and effect is established—a mode of proof, known as the *experimentum crucis* of Baconian philosophy.

We may adduce a few examples. Some years ago, the theory was advanced that electricity was a most important agent in the growth of plants. It was found that a grape vine, planted at the foot of a lightning rod, made a growth several times greater than another vine in a similar soil a few yards distant. This was thought to be proof positive—"no doubt at all," but the electricity streaming down the rod, stimulated a most vigorous growth of the vine. An experiment to prove the same theory, was made by burying a copper wire a foot or more beneath the soil, the ends of which passed upwards like lightning rods, and terminated in sharp points. The row of beans planted over the buried wire, was twice as large as any other beans in the garden—another "indisputable proof" of electrical influence. It was found however, by more careful examination and other experiments, that the rapid growth of the vine was solely owing to the deep and loose bed of earth, made by digging the large hole in which the lower end of the rod was buried; and that the loose earth of the trench in which the wire was laid, was the sole cause of the fine appearance of the row of beans.

The luxuriant appearance of the grass under the shade of a tree standing in a pasture, was pointed out recently as a proof of the theory that "shade is the best manure." The tall green growth at this spot, was indeed in strong contrast with the short pasturage elsewhere; but a further examination proved that other trees growing in adjoining fields not occupied as pastures, exhibited no such appearance; and that the larger crop in the shade was a result of the amount of *top dressing* the land had received here, from the numerous cattle which had made the shade of this tree a resort for several hours each day,—with the added reason that cattle always prefer grass grown in the sun, to shaded pasturage, especially if that shaded portion has been stimulated by fresh manure; and hence this grass was not gnawed so short as the other.

A striking instance of this fallacious mode of reasoning, occurs in the origin of the opinion that wheat turns to chess—the more remarkable on account of the singular combination of causes to favor such an opinion. A farmer sows a field of wheat; a part of it is injured by winter; chess is found growing abundantly on the injured spots and no where else; and the first doubtful thought is that the wheat by partial injury has been changed into chess plants. But so bold a conclusion needs stronger and additional proof. This is found in the fact that if the wheat was eaten off early in the season by cattle, chess springs up in its place; that if injured seed is sown the same result often takes place; and especially that when apparently clean wheat is sown, plentiful crops of chess immediately follow. The application, however, of Bacon's *experimentum crucis*, which requires that the experiment should *fit the theory* in all possible variations, proves the fallacy of the opinion of transmutation. For it is found that there are many parts of the world where the chess plant is entirely unknown, but which are equally liable to the changes of weather producing winter killing, and where cattle are as liable to break into wheat fields, as here. It has also been ascertained, that the chess plant will grow and perfect its seed, in a dense growth of wheat and other plants, unperceived, and thus fill the ground with its seed; but that when this shading is removed, as by the winter-killing of the wheat, or its destruction by cattle, the chess plants will spring up several feet high and spread abroad in every direction, bearing many thousand fold, and that this remarkable property alone is sufficient to account for the supposed change of the wheat to chess. It is likewise found, that from the smallness of the chess seed, it frequently exists unperceived in great numbers in what is supposed to be clean seed wheat, and is thus often largely sown, unknown to the farmer; and that its extreme hardiness enables it to escape injury during its dissemination in manure, and in the dung of cattle and other animals. The fact that with all these adverse circumstances, many farmers in various parts of this State, have succeeded by many years of great care, in entirely eradicating the weed from their seed and from their soils, shows beyond a doubt that some other explanation than transmutation must be adopted for the appearance of fields of chess where wheat only has been sown.

We could adduce other instances; but these may be sufficient to show the importance of forming opinions with great care, and not until a thorough course of accurate experiments has been resorted to,—whether it be in the estimate of the value of manures, different modes of planting and cultivation, the profitableness of different breeds of animals, or any other important question in farm economy.

Destructive Apple Insect.

EDS. COUNTRY GENTLEMAN.—You desire 'valuable practical information relative to this insect.' If the following is 'valuable practical information,' you can print it.

During the latter part of July last, I discovered a black ooze issuing from the trunk of a young Northern Spy. The orifice was eight inches from the ground. Cutting off the bark, I found that the inner bark and the newly forming wood had been chewed up, as I judged, leaving a brown saw-dust—like residuum. The outer bark appeared to be untouched, but was discolored; hue, darker than the natural. Extent of operation, three-fourths of the circumference; from entering orifice to insect, two inches. Insect about one inch long; color, yellowish white, three-sixteenths of an inch wide just back of eyes, tapering to tail; teeth, black, and hooked; body divided by eleven worm-like rings. This tree was accidently pulled up after it had been set out, and was injured.

Second case.—A young Gravenstein—orifice two inches from ground. Indications same as in case first. Three insects at work eight inches from the orifice. Upon examining this tree, I found that the heart had decayed so that I could thrust up a probe five inches. This was not the work of this insect, but must have been a previously existing defect.

These were the only trees affected on my own grounds. Since then I have examined dozens of trees on which these insects have wrought; in several cases causing the death of trees six inches in diameter. All of these trees were *diseased, injured* or *neglected*. Conclusions from this observation—1st. That if *healthy, sound* trees are *well cared for*, there is but little to fear from this insect. 2d. That if it should find a lodgment, *regular inspection* of the trees will detect its presence before much evil has been wrought. 3d. If the indications are found, the insect can soon be exposed by

following the trail with the knife. Lastly, its presence indicates carelessness on the part of the *nurseryman*, the *carrier*, or the *horticulturist*. H. T. Vose. *Jackson C. H., Ohio.*

A Day or Two in Fayette.

Lexington, in the county of Fayette, and State of Kentucky, is a name consecrated in the memories of all true Americans, as one synonymous with exalted patriotism and true greatness. Like Mount Vernon, Monticello, Marshfield, and some other like distinguished places, it will for all future time remain one of the Meccas of Pilgrimage to those who love to look upon the homes of the great statesmen whose labors and influence have shed a halo of glory upon their country. Henry Clay of Ashland, has immortalized Lexington.

A mile beyond the outskirts of the town, on the high road to Winchester, lies Ashland, for many years the home of the great statesman—the place where he *should* have died, and not far from which his remains lie buried. It is an extensive estate of some eight hundred acres, as the great man occupied it, in cultivated fields and woodland parks, now owned in separate divisions, by two of his sons and his aged widow. It is scarce worth while to describe it, other than as comprising, in its ample enclosures and the tasteful appendages of its home-grounds, a most fitting place for the abode of the illustrious man who so long made Kentucky a great name in the land, and drew from his admiring countrymen all the plaudits and reverence which grateful hearts could bestow. The dwelling-house of the departed statesman, worn and dilapidated by time, has been pulled down, and on its site stands an elegant brick mansion, built in excellent style by its present proprietor, James B. Clay, a son of Henry. The mother, and widow resides about a mile distant on another part of the estate, with her son John,—a pleasant elevated place, overlooking the old residence, and the neighboring town. Lexington is well built, for the times in which it *was* built, finished, much of it painted, the remainder whitewashed, and is quite in tolerable repair. It is surrounded with fine residences, gardens, grounds, and farms, and the appearances of wealth and luxury. The oldest of the large towns, Lexington drew into its borders the early talent, enterprise, and monied capital of the state, and up to the present is the abode of more distinguished families than any other. Louisville is a much larger place, but is a commercial and manufacturing town, not the seat of its old aristocracy and great landholders. Yet the wealth of central Kentucky is not concentrated within the bounds of Lexington. The owners of much of it live in the surrounding country, many in Fayette, making the town their commercial centre, and the place of their stated gatherings. Frankfort, some thirty miles to the north-west, is the seat of state government; but it is a *provincial* town, compared with Lexington, and on one extreme of the fertile, sunny region of which this is the business centre. Among its notorieties, Lexington has many public Institutions —of Education and other Philanthropies, besides others in its neighborhood. Prominent among these neighboring institutions is one of a personal kind, and that is embodied in

Robert J. Breckinridge, D.D.

This gentleman, the master-spirit of the Theological school or Seminary at Danville, Kentucky, has his family residence eight miles north of Lexington, on the turnpike road to Newtown. A son of the distinguished Attorney-General of the United States in Mr. Jefferson's time, he was educated a lawyer, and engaged for some years in the profession. He then became a Presbyterian clergyman, and after many years of laborious service as a pastor in Baltimore and his native state, was installed as a professor in the office he now so highly graces, and in which he has achieved a name and reputation co-extensive with his country. But these are not all the honors which Dr. Breckinridge may claim; if they were, they would not here be recorded. He is a distinguished Farmer on his own estate of Breadalbane, some five hundred acres of the finest Kentucky land, and a prominent stock-breeder among the country gentlemen of his neighborhood. Though not aspiring to the mark of sundry of the scriptural patriarchs in the number of his herds and flocks, he is doubtless much more select in the choice of his varieties; for his Short-Horns, his horses and mules are all of the best. For four months of the year—June to October—the Dr. resides upon his estate. The other eight are spent in his collegiate labors at Danville—labors of love with him, and in the discharge of a conscientious duty which he would not willingly postpone. Yet he delights in his farm, and loves agricultural pursuits with the ardor of an enthusiast.

A drive over a fine undulating road, past luxuriant farms and noble forest-parks, brought us to the home of the distinguished Divine at 10 o'clock on a delicious October morning. Through a gate, in the usual Kentucky fashion, a carriage way leads into his spacious lawn, down a slope, past a spring-house, and up a short hill on to the table land, where stands his plain, yet commodious dwelling, surrounded with those rural appendages, which give to the best of these Kentucky homes an air of repose and dignity. Finding the proprietor at home, a warm welcome, and a seat in the broad verandah of the house, placed us at once at our ease. A two hours stay, to which our time was limited, inducted us rapidly into the mode and manner of the Dr.'s agricultural pursuits, as well as the constant professional labors, from which even his months of vacation do not wholly spare him. It was with the highest pleasure that we heard the words of wisdom and experience, from a man who, as a political-economist, statesman, and divine, had arrested and fixed the attention of great minds in foreign lands as well as his own, and in the midst of laborious duties in public capacities still loved to till his own acres, tend his own herds, and watch after their improvement and welfare. Henry Clay was a distinguished stock-breeder on his farm, and in the vacations from his public labors loved to look after his horses and short-horns, his asses and mules, his sheep and his swine. Daniel Webster loved to be among the cattle and flocks of his farm, and we have heard him discourse most eloquently on the comparative qualities of his Devons, and Herefords, and the luscious cream of his Alderneys. And Doctor Breckinridge, their peer in thought, if less privileged in his labors of State, and as brilliant a colloquiast as either of them when living, loves his cattle equally as well, and neither Clay nor Webster could talk of their own American trees and parks, and rural occupations, more eloquently, for he was also "to the manor born." The Doctor showed us his herd of Short-Horns, and some fine young horses, which were driven up for our inspection. He has been a breeder of Short-Horns for thirty years, has pursued his own course in their cultivation, and a correct physiologist, he has been eminently successful in producing a large and excellent herd. A great man in thought can be a great man in practice on any subject, when he chooses to give his mind to it, and looking at Doctor B.'s agricultural labors, and their results, we could not but reflect upon the great benefits which men so employed may confer upon their countrymen, contrasted with many others, who affecting to be equally prominent in their professions, and with less physical infirmities, while away their terms of recreation in—nonsense.

With much regret that we could not partake of his urgent hospitalities for the day, we reluctantly bade

this distinguished man adieu, mentally regretting that his useful example should be so rarely followed by others of like abilities and opportunities.

Our return to Lexington brought us around to the fine farms of

Capt. Ben: Warfield and his Sons.

They occupy a large and beautiful estate four miles northeast of Lexington, now divided into three farms, one owned by the father, another by William, and the other by Benjamin junior—the sons. Capt. Warfield* is one of the oldest Short-Horn men in Kentucky. For forty years he has been a successful breeder, beginning with the descendants of the Gough and Miller importations in Baltimore, early in the century, and afterwards from the cattle of Col. Sanders' importation of 1817, and other later importations from that time to the present. Hundreds of well-bred Short-Horns have descended from his herd, and been scattered all over the Western States. With exceeding regret that his impaired health would not permit him to go out with us, we examined their several herds in company with his sons, and admired much the superior style, symmetry, and excellence in their breeding. A critical examination of these herds, Dr. Breckenridge's, and some other Kentucky breeders, together with a close inspection of the Short-Horns imported by them twenty years ago, has convinced us that the skill of these gentlemen has much improved their stock in quality beyond *those* importations, and but a few of the animals recently imported will excel them in general excellence. A family dinner at the house of Capt. Warfield, in company with the sons, a brief call at the farm of William, the son-in-law of Doctor Breckinridge, and we reluctantly left this agreeable home for a passing call at the fine estate of

Doctor Elisha Warfield,

two miles nearer, and on the way to Lexington. Here is a large farm, well improved, with a numerous stock of blood horses, and an excellent breed of Short-Horns upon it. Doctor Warfield has long been celebrated as a breeder of blood horses. Lexington, a horse recently sold to R. A. Alexander, Esq., of Woodburn, for $15,000, was bred by Doctor Warfield. He has several beautiful brood mares, fillies, and horse colts, and breeds now, not so largely, but as enthusiastically as ever. His cattle are fine, and he is now crossing them with fresh blood of late importation. Woodland pastures, fine fields, ample dwelling, and convenient surroundings adorn this estate, and after a pleasant visit of an hour we hurried on to further engagements for another day, beyond Lexington.

Indian Millet or Dourah Corn.

MESSRS. EDITORS—In the last Patent Office Report there is a page or two devoted to the history, cultivation, &c., of the Dorah Corn. In different places it is known by different names. The "Report" says "this plant grows well on the poorest soils, yielding from 10 to 100 bushels of seed per acre, according to the quality of the land and the mode of culture. It is sometimes cut green for soiling cattle and mules; and if properly done, so as not to injure the buds near the ground, it may be cut several times in a season. When intended for fodder, it is cut and cured like the stalks of Indian corn. They remain green for months and do not ferment nor spoil so soon as Indian corn and other grain. After it comes up it will grow in spite of the frost, rain or drouth, being a very hardy plant. After it gets a start it defies weeds and grass, and will make a crop in spite of every disaster."

Much more is said respecting this plant in the Report. I have read in some of our papers recently, that the Dorah has been somewhat extensively cultivated in Ohio, and fed to cattle in connection with meal, with very good results. Last spring I received a few seeds of the Dorah. Thinking them of no particular value, they were planted in a dry gravelly soil; they soon camp up, and grew well till checked by a severe drought; some of the leaves were completely dried. Rains came on in August, which gave the plants a new start. It out-grew the Chinese sugar cane, near by, and headed out and got fairly in blossom when the first frost came. The stalks were cut up first week in October, and thrown on to a scaffold where they remained till 4th of the present month, when I examined to see if the seeds had ripened. I cut a piece from one of the stalks, and stripped off the outer coating, and ascertained that the juice was very sweet—more so than any maple sap I ever tasted. I doubt much whether the Chinese sugar cane is sweeter.

From the fact of its containing so much saccharine matter, and its hardiness, I believe it may prove a most valuable plant, in connexion with others, as a forage or soiling plant, and worthy more extensive and further trials. Says the P. O. Report: "Taking into consideration the facts that it will yield more stalks, fodder, and grain, on a greater variety of soils, and with less labor, in any season, and return more litter to the land than any other grain, and being a universal food for man and beast in tropical climates,* it may be justly considered one of the most valuable of the Cerealia."

Whether it may prove more valuable for soiling purposes than the Chinese sugar cane, is a question for future experiments to determine. But I have no hesitation in saying either of them will be found far preferable to our Indian corn, as green, or as winter forage for our farm stock. L. BARTLETT. *Warner, N. H., Nov.* 20, 1856.

Experiments with Potatoes.

Last spring, June 2d, I planted one pound and eleven ounces of the blue or fall Mercer. I cut them so as to have one eye on each piece, and three pieces, with a shovelful of horse manure, to each hill, and from them I dug 53 lbs. of potatoes. I planted five pounds and thirteen ounces of the Jenny Lind potato in the same way, and from them I had 132 lbs. 8 oz. of potatoes that were worth having; one of them weighed 2 lbs. 13 oz.; twenty of them filled a half bushel, and weighed 25 lbs. 8 oz.; two of them measured eighteen inches in length. In measure, there was one bushel of the Mercers, and three and a half bushels of the Jenny Linds. The land on which they were planted was 18 by 24 feet. S. H. COWLES. *Norfolk, Ct.*

Chinese Sugar Cane.

MESSRS. EDITORS — One of my neighbors raised some of the cane from seed sent to him from the Patent Office. I took a few of the stalks and extracted the juice, and boiled it the same as maple sap. It was far superior to any cane molasses that I ever saw. The yield of syrup is one to six of the juice.

Any information in regard to its cultivation, and the manufacture of the juice into syrup or sugar, will be thankfully received by S. H COWLES. *Norfolk, Ct.*

*Since this was written, intelligence of the death of Capt. Warfield has reached us. He was an upright, honest, useful man, and will long be regretted by those who best knew his excellent character.

*By early planting, I think the seeds would mature as far north as this.

The Currant—Two of the Newer Varieties.

The currant needs no eulogy. Its hardiness, productiveness, ease of culture, time of maturity, its many uses by way of jellies, jams and tarts, and its refreshing qualities eaten fresh on the table, place it above any other summer fruit, for universal cultivation. Yet very few ever see the currant in perfection. No fruit is more generally neglected in culture. Grown in thick grass sod, never pruned, never manured, and the bushes allowed to assume the character of a mass of stunted brush, the berries are not more than one-fifth the size (as we have found by actual measurement,) which they attain when well cultivated, the old wood cut away, and the vigorous young shoots only allowed to bear. The old red and white currant, by such treatment, may be made larger than the new mammoth sorts will grow without it. This improved management is very simple and easy, and does not require more labor annually than every good farmer gives to a row of potatoes of equal length.

The old varieties will be wonderfully improved by this course—but there are some new sorts which, so far as size is concerned, may be made greatly to exceed them. Nothing of the kind could grace a tea-table better, than a mixture of the Cherry and White Grape currants, new varieties, which with good culture will average in the berries, the latter nearly, and the former fully half an inch in diameter.

WHITE GRAPE CURRANT.

The *White Grape* is the largest white currant, being distinctly larger than the White Dutch, and fully equal to it in flavor. The bush is rather a slow grower, and spreading and somewhat irregular in form. The figure accompanying this article gives the exact dimensions of bunches grown on bushes with moderate cultivation in a clean, garden soil; the larger berries being nearly or quite half an inch in diameter. We have cultivated it many years, and found it uniformly productive, having procured it originally of Ellwanger & Barry, of Rochester, who have now, in their immense nursery, nearly an acre of saleable plants, of this variety alone.

CHERRY CURRANT.

The *Cherry* currant, is the largest known red currant, the berries, with high culture, measuring five-eighths of an inch in diameter, half an inch being very common. The bush is a strong grower, with the shoots short and thick, and easily distinguished in appearance from other varieties. Its flavor is not equal to that of the Red Dutch, being rather acid, and it is not generally so productive as some others, although heavy crops are sometimes seen.

Those who procure these large varieties, and give them no attention, will be disappointed to find them but little larger than older sorts.

The Dorking Fowl.

The Dorking is the oldest, and for all purposes, the best domestic fowl in England. Its origin is uncertain. Some suppose it was bred by the ancient Britons, previous to the invasion of the island by Cæsar, as the conqueror informs us that the Britons had a large number of cattle; and that they had both hens and geese: but of the fowls they could not eat, as they were prohibited by the Druidical priests.

It is not improbable that Dorkings were first carried to England by the Romans, for Columella, who wrote 2000 years ago, describes the domestic fowl of the Romans as possessing, among other traits, the following characteristics of the best Dorkings of the present day: "Let them be of reddish or dark plumage, with black wings. * * Let the breeding hens be of robust body, square built, full breasted, large heads, with upright and bright red combs. * * Those are believed to be the best with five toes."

Wherever the Dorking may have originated, it is quite certain that England is the only country where this bird has been successfully bred for at least the last one hundred and fifty years, until quite recently; but for the last few years this superior bird has been growing in favor on this side of the Atlantic.

The Dorking was named from the town of Dorking, in the county of Surrey, in England, a town where this bird has long been bred in great purity.

A few years since, poultry fanciers in England, gave the preference for purity of race, to birds having sin-

DORKING FOWLS.

gle combs; but now those possessing double combs are accounted as pure-bred, and are entitled to equal honors at all the poultry fairs. Public taste alone has not extended this rule, but there is another reason of a more stable character, one that breeders everywhere are obliged to acknowledge, which is stated by the Rev. Mr. Wingfield as follows:

"But another reason is at hand for relaxing the rules on the Dorking comb, and one too, that is based on the experience of the most skillful and most successful of our Dorking breeders, who know that, from the best selected birds with like combs, single, rose, and cup-combed birds are produced in the same clutch. Many of the latter in particular are among the best-shaped and finest birds; and yet from the prevailing fashion are too often doomed to the spit, instead of being preserved as the probable parents of superior stock."

The Dorking family is distinguished by the follow-characteristics:

"In the cock the single comb should be stout, well arched, and regularly toothed, and about two inches high above the skull in its loftiest part. The double comb should not be more than an inch and a half high, and very double, but with its points of an equal height. Both kinds of the comb, as well as the wattles, should be bright crimson, the latter being large and pendulous; head small, with a well-arched forehead; neck tapering gradually from the shoulder upwards; neck-hackle long; shoulder broad; breast wide and very prominently round; back broad, stout, and square; legs white, short and muscular; claws five in number on each foot, and well defined; tail ample and well sickled; carriage bold and firm. When erect, the full height is about twenty-two inches."

"In the hen the comb should be low, small, and regular; but in all other respects her form, in diminished proportions, should have the above characteristics. In height, when erect, she should be about fifteen inches."

SUB-VARIETIES.—There are but two principal divisions in the Dorking family: the White and the Colored.

The white Dorking cock and hen have perfectly white plumage, bills and legs; a bright-red and full double or rose comb in both sexes, distinguish the best birds. Some have single combs, but it is considered a defect. The white are considered less hardy, and are one to two pounds less in weight, than their colored relatives.

The colored Dorkings vary in hue from a dark-hackled, black-breasted bird, through every intermediate shade, to an almost white-hackled and light-speckled fowl. These have been subdivided according to the prevailing color of the respective birds, into Gray, Speckled, Spangled, Red, and Cuckoo. We think the dark colored the best.

"Peculiarities," says the English "Poultry Book," belong to every breed, and it is one in Dorkings that almost every color may be produced from the same parents (black and white alone excepted), and the characteristics of this bird are still preserved unimpaired."

The Dorking sometimes has a sixth toe, and one of the best cocks we ever saw was marked by this peculiarity. On the other hand, a fine bird will occasionally be bred in the same clutch, as the one with six toes, which has but four toes. Such a bird should not be rejected as impure, for its progeny is as likely to have the fifth toe as that bred from the other.

The weight of the colored Dorking cock varies from seven to eight pounds; that of the hen from six to seven; but these weights are frequently exceeded from one to two pounds. The hens are good layers, and their eggs are rich and large, next in size to the Spanish.

Dorkings mature earlier than most fowls, and months earlier than the Shanghai. This is a quality that should not be overlooked, as early chickens always bear a good price.

In selecting breeding stock, the first care should be that the birds possess the characteristics of the family, especially in reference to squareness of build, shortness of legs, and fulness of breast; a quaint write says of the latter qualification, that "a Dorking should be all breast." The same writer thinks "pullets produce the best chickens for stock birds, but hens for early maturity."

To secure full clutches of chickens, no more than four or five hens should run with each crower. Beside, the sexes should be from different stocks, at least every alternate year, if they can be mated well in this manner. It is better to keep the sexes separate during winter until near breeding time. All young crowers, of this or any variety, from which it is intended to breed, should be kept by themselves until nearly a year old.

Mr. Doyle, author of "The Illustrated Book of Domestic Poultry," a work of much merit, says:

"We have Mr. Baily's professional and disinterested judgment, which has pronounced "that there is no breed to be compared with the Dorking, which unites in itself more than any other, all the properties requisite for supplying the table; that the hens are good sitters and good mothers, and that there is a natural tendency in the breed to fatten, so that the young ones are made to attain to eight or nine pounds weight, and at the table they surpass all others in symmetry of shape, and whiteness and delicacy of flesh."

It is almost universally admitted that no fowl is so well adapted to the table as the Dorking, for certainly if compactness of form, whiteness, fineness, and tenderness of flesh are the requisites, it must be conceded that this bird is pre-eminent; and in respect to flavor the Dorking is nearly equal to the Game fowl.

Roosting perches for the Dorking should not be more than three feet high.

Some have thought the Dorking to be a tender fowl, but they are not generally so considered either in England or this country; and so far as our experience and observation are concerned, we consider them as easily raised and as hardy as the Shanghai.

GREAT MOUSE HUNT.—A great mouse hunt came off recently in Bridport, Vt. Two parties of forty on each side, with the addition of as many boys as they could enlist, were organised under Joseph Fletcher and Charles H. Hill, as Captains. The result, according to the count of the judges, was as follows:

Joseph Fletcher, 512 rats—17¾ bushels mice.
C. H. Hill,..... 447 rats—13¼ bushels mice.

Total,..... 959 rats. and 31¼ *bushels of Mice.*

Effects of Underdraining.

We have often heard of the great benefits resulting from *underdraining*, but have never seen them more strikingly illustrated than recently on viewing a piece of land on which had grown cabbage the present season. We understood the proprietor to say that he had sold from this piece of land, containing three-fourths of an acre, 4000 heads, varying in weight from 20 to 47 lbs. each—averaging at least 30 lbs.—at the rate of $11.50 per hundred heads. This, if we compute right, gives a net produce of more than $400 to the acre. When we take into view that the culture of cabbages requires no extraordinary skill, and but a moderate application of labor, we think this product equal to any we have seen the present season. We know not to what to attribute it, except the fact that the entire piece has recently been *underdrained* to the depth of about three feet. It is flat land; has been well fertilized for many years by the liberal application of sea manure, and has generally yielded from two to three tons of hay to the acre, besides a fair cutting of second crop. If *underdraining* can produce such effects, there are hundreds of acres along the shores of Old Essex, Mass., that can be equally benefitted by this process. A Constant Reader.

Application of Yard Manure.

The statement of John Johnston of Geneva, in a late number of the Country Gentleman, is interesting, and it suggests some considerations in connection with known facts and experiments which are perhaps worthy of attention.

It may be laid down as a universal rule, applicable everywhere, that stable manure to be applied in the most efficient manner, should be perfectly intermixed with the soil, at precisely such a depth as the roots of plants go in search of nutriment. Perhaps the most perfect intermixture with the soil, so far as it goes, is that effected by the application of liquid manure, which becomes very finely diffused through it. But as only a portion of the manure will dissolve in water, the next mode, nearly as perfect, and more generally applicable, is to pulverize the manure finely, either by harrowing, or by grinding it down, with a "drag-roller," both of which at the same time work it into the soil. Experiments have been made which go to show that manure completely pulverized and very intimately intermixed with the soil, will do more good than three or four times as much fresh manure left merely in lumps and plowed under without any further care.

We see the reason why John Johnston finds it best to leave his manure in heaps through the first summer. He *harrows* it into the wheat ground, which can be done much the best with rotted manure; and if the quantity of straw he uses is quite large, as is the case with all good farmers, this amount of vegetable matter enables it to hold most of the escaping gases. The proper way would be to add some sods or loam, to the heaps, and it would make an admirable compost by autumn.

Great advantage is always derived from spreading manure on the surface in autumn, to be plowed under in spring. All the soluble portions are washed in liquid form into the soil, and are intimately diffused through it. This advantage is so great that some good farmers prefer this practice alone to any other. Turning in the remainder, which lies on the surface, during the spring, improves the *texture* of the soil, even if all the enriching parts have been washed out, which however is not the case.

Rules should be laid down by every farmer in the application of manure.

1. Manure should be reduced to such a condition that it will easily break up fine, and mix into the soil easily. A summer fermentation, secured from loss by intermixed sods, ditch cleanings, or loam, is unquestionably the best.

2. Manure should never be plowed under, without first having been well and finely broken up, and worked into the soil by repeated harrowings. Grinding down with "a drag-roller and harrowing often enough, will enable the farmer to mix fresh manure as completely with the soil, as rotted manure, only with more labor, yet with a smaller loss from evaporation. A Reader

The Ground Cherry.

Messrs. Editors—I write to request information in relation to a certain fruit which I have received from Ohio, with a view to its introduction here. It is called the *Ground Cherry*, and is in size and form very much like the varieties usually cultivated in this country, with the addition of an external husk similar to the inner husk of corn, and is of a whitish color inclining to a yellow, and of a pulpy texture, not dissimilar to jelly, with seeds distributed like the currant, growing as I am informed, on a low bush or shrub. Now, may I ask of you the favor to inform me through the columns of your paper, what is the proper mode of culture, commencing with the propagation from the seed and its after treatment, manures or soil, and the proper manner of gathering and keeping the same, and furthermore the uses and market value of the fruit. G. Vroman. *Louville.*

The plant above described is an annual of very easy culture. It will grow on any tolerable garden soil, and may be sown in drills two feet apart, the plants to be thinned to one foot apart in the drills. The fruit must be picked by hand, and it is used for pies and sometimes for preserves, by those who like it. We had it growing in our garden for several years, but never found any one who liked it. It is a bad plant to introduce on to a place, unless the berries are all carefully picked in the autumn, as the seed is perfectly hardy, and every one left on the ground will be sure to start up in the spring. It took us several years to eradicate it.

Growing Hedge Thorns from Seed.

Messrs. Editors—How may I succeed in raising our common white thorn from seed, for hedging purposes? I have tried various ways, but have failed so far from not understanding the modus operandi. Jno. J. Rudisill. *Pulaski, O.*

We are not familiar with the process, since the English thorn has been generally discarded for hedging in this country. Our impression is, that nearly the same treatment is given to the seed as nurserymen commonly give to cherry stones. That is, mix the *fresh* seed (before becoming dry,) with moist sand, and subject them to freezing and thawing through winter. If our recollection is at fault, will some of our English correspondents correct us, and give the best process?

Gum on the Peach.

Messrs. Editors—Can you give me a remedy that will prevent gum oozing out at the roots of young peach trees? I have tried leached ashes and lime, but to no purpose, and salt will kill the trees. S. Barnes. *Orwell, Ohio.*

Gum oozes from the peach in consequence of some injury to the tree. If this injury is by the peach worm at the root, it must be dug out with the point of a knife and destroyed. An examination two or three times a year, destroying all that exist, will extirpate them. Ashes assist in keeping them out, after the trees are cleared.

The Chinese Yam—Dioscorea Batatas.

MESSRS. EDITORS—Within a year or two past, much has been published in the agricultural and other papers, in regard to the Chinese Yam, (the Dioscorea batatas,)—some persons asserting that it is a most valuable acquisition to our list of esculents, and that its superiority as a nutritious and palatable food is such, that it is destined to supersede every other potato, &c., while it is equally true there are many well informed men that doubt its being a very valuable acquisition to our country.

Without taking *sides* either way, it is to be hoped that a sufficient number of experiments have been made through the past season in different sections of the country to fully decide the questions relative to its adaptation to our climate and different soils—its productiveness and its value as food. Should the Chinese Yam prove as valuable an esculent as some of its advocates predict, it will, indeed, prove an inestimable boon. That the common potato, (from its liability to "rot, rust and mildew," and its fluctuation in prices,) has become one of our most uncertain farm crops, is a *fact* that can neither be "hushed up, or coughed down." The "why and the wherefore," the "cause and the cure" of the potato malady, are alike shrouded in a mystery that none can solve.

Last year (1855,) the potato suffered but little from *rust*, and less from *rot;* the yield was extraordinary, and the quality good; and it was fondly hoped that the potato had recovered its pristine vigor. This year, thousands of acres were smitten with rust ere the tubers had attained a third of their usual growth; the result of this was, the tubers were few in numbers, and small in size. On well manured and moist soils, the rot, with much of its former virulence, attacked the potatoes, which *has*, and *will*, greatly lessen the otherwise short crop.

Last year at "digging time," the price of potatoes here ranged from 30 to 33 cents per bushel, and many farmers refused to sell at those prices, hoping to realize higher prices in the spring; but when spring came the price was from 10 to 15 cents per bushel, and small demand for them at those low prices. This year's crop has been selling from 60 cents to one dollar per bushel, and scarce at those prices.

In my rambles about the country last August, among the farmers, I saw cart loads of potatoes that had been taken from the cellars, and thrown over the fences to waste and perish, uncared for. Had they been Chinese Yams *possibly*, (if they had not been wanted for planting or other uses,) they might have been kept in the cellars till this time, and still been as "good as new."

The Patent Office Report for 1854, has several pages devoted to the Chinese Yam, accompanied with several very accurate engravings of the vine, tubers, &c., also directions for its propagation, culture, &c.

Last spring I received from Middle Island, N. Y., a small tuber, the size of a bean—afterwards a similar tuber and a cutting of a root; this was an inch long and the size of a small pipe-stem. They were planted about 20th of May. It was several weeks before the tops made their appearance. Drought followed, and the tops made but little progress for some weeks; but the latter rains gave them a good start, and they grew finely till checked by frost about 1st of October. Soon after, I dug them, and found a yam in each hill about ten inches in length, and from one to one and a half inches in diameter at their biggest part; there was also several smaller ones. I think they will make about fifty cuttings, or sets, for next spring's planting. Have not cooked any of them, so shall not give any opinion in regard to their eating qualities.

From our slight knowledge of the plant, good cultivation, with deep and thorough pulverization of the soil, will be necessary to insure good crops.

Hoping to hear from others who have experimented with this newly introduced esculent, I stop here. LEVI BARTLETT. *Warner, N. H.*

Chufas or Earth Almond.

MESSRS. EDITORS—I send you by express a small package of the new esculent, "Chufas or Earth Almond," recently distributed by the U. S. Patent Office. They were procured by the Agent of the Office in Spain, as will be gathered from the accompanying notice, which appeared on the package I received from the Commissioner of Patents, in May, 1855:

"It grows spontaneously in the light humid soils of Spain, and is cultivated in Germany and the South of France. If planted in May or June they are ready to be harvested in October. They resemble in taste a delicious chestnut or cocoanut, and like them may be eaten raw or cooked. They are chiefly employed for making an orgest, (orchata de chufas,) a delightful, refreshing drink, much used in Spain, Cuba, and other hot climates where it is known. When mashed to a flour, which is white, sweet, and very agreeable to the taste, it imparts to water the color and richness of milk. At Almasero and Albarago considerable attention is directed to the cultivation of this plant, eight acres of land yielding a profit of $3,500 in five months."

The tubers when received, had a shrivelled appearance like those I send you, and I had doubts of their vitality. They were accordingly buried in a heap, and a stake marked the spot until some time afterwards, when on passing, I observed they were peeping above the soil, and showing unmistakeable signs of life. They were then transplanted into drills, and in the fall I harvested several quarts.

These were hung up in a bag in a back room, and subjected to freezing and drying all winter; and in May last I planted 400 tubers in drills two feet apart and one foot distant in the row, in dry sandy loam, and about the middle of September I harvested a portion of them, getting a pint to the hill, and yielding at the rate of some 300 bushels to the acre.

The remainder of them were left in the ground until the last of October, when observing the hens were scratching them up and devouring them greedily, I was obliged to secure them from their depredations immediately. Corn was strewn around to entice them away; but they had got a taste of the almonds, for which they had a better relish than for corn.

Why may they not be raised for fowls, making a better winter feed, for change, than grain, and supplying the place of herbs and worms at that season of the year?

Hogs are very fond of them, and from their saccharine nature, they probably have good fattening qualities.

When first taken from the ground, they are comparatively tasteless; but when thrown into a pile for a few days and allowed to sweat and shrivel a little, they are sweet and delicious, very much resembling a partially dried chestnut. They are said to make a fine beverage when slightly burned and used as coffee.

McCullough, of Cincinnati, thinks them worthy of culture as an ornamental plant, but I have not yet seen a show of bud or flower, although their grass-like foliage of polished green has a pleasing effect, especially when in a border.

Upon the whole I think the plant a fine acquisition, and worthy of a more general dissemination. And when its production and edible qualities are fully known and appreciated, it may yet take its place in the horticultural ranks with other culinary indispensables.

Should any of your readers wish to give it a trial, I can accommodate a limited demand for the tubers. H. B. LUM. *Sandusky, Ohio, Nov.* 20.

Experiments in Manuring for Potatoes, &c.

To the Editors of the Country Gentleman—During the past summer I apportioned a large piece of land with the view of testing the value of certain hand-manures as fertilizers in comparison with stable-dung. The following is the result of some of the experiments, which were conducted under my own supervision, and can therefore be relied on as correct:

The manures used were—guano, soot, superphosphate of lime, potash, nitrate of potash, nitrate of soda, sulphate of magnesia, and stable-dung; all of which were of the best quality that could be procured from town, and consequently the cost of cartage is added, so that the reader may see at a glance the total cost of each, to which I solicit his most attentive consideration:

Plot.	*Description of Manure and the weight per Verge‡*	Nett cost. £ s. d.	Expense of carting & mixing & spreading. £ s. d.	Distance of plant to plant. Inches.	Total cost. £ s. d.	The produce in pounds pr. vergée.
1—	Without manure,	8 0				4,600
2—	200 lbs. superphosphate of lime,	0 16 0	0 1 0	16 by 9		6,400
	150 lbs. guano,	14 0	1 1 0	18 by 9	0 17 0	
3—	100 lbs. superphosphate of lime,	8 0	0 8 0			7,200
	3 quarters soot,	4 6	0 13 6	18 by 9	2 5 6	
4—	300 lbs. guano,	14 0	2 2 0			
	100 lbs. superphosphate of lime,	8 0	0 8 0			
5—	200 lbs. guano,	14 0	1 8 0	20 by 9	2 12 6	9,200
	*11 tons of vraic,	1 6	0 16 6			
6—	*8 tons of stable-dung,	5 0	1 7 6			
	*9 tons of vraic,	1 6	1 0 0	20 by 9	3 13 0	7,600
7—	600 lbs. guano,	14 0	0 13 6			
	*14 tons stable-dung,	5 0	4 4 0	20 by 10	4 16 0	8,800
8—	*14 tons stable-dung,	5 0	4 4 0	24 by 20	4 6 6	10,000
9—	*16 tons stable-dung,	5 0	3 10 0	20 by 9	5 5 0	9,200
			1 15 0	24 by 12	6 0 0	10,000
10—	*20 tons stable-dung,	5 0	2 10 0	†27 by 24	7 10 0	16,000

* The vraic and stable manure were carted on the ground for 2s. 6d. per ton.

† The tubers or seed planted were above medium size, and planted whole; the largest size being used only in plot 10.

‡ Four-ninths of an acre.—Eds.

On examining the above table, it will be seen, in plot 1, what the land did produce without the assistance of manure. All the ground was in that condition previous to experimenting.

Plot 2.—The superphosphate of lime had a tendency to increase the quantity of tubers, but there were more small ones in this plot than in any of the others. The only other advantage in using this manure is the improvement in the flavor of the potato.

In plot 3, the tubers were large and even. The soot was sown broadcast previously to flat-hoeing. The color of the foliage was changed to a beautiful dark green in a few hours after its application; doubtless owing to the ammonia contained in the soot. In all my experiments on the potato I have found soot increase the size and produce. It is a most valuable manure, and ought to be more generally used by the farmer for most of his crops, either by itself as a top-dressing or in a mixture with earth and dung, but the first is much the best way of using it. I have no doubt that, had the same value of vraic ashes been substituted for the superphosphate, a much heavier crop would have been the result

Plot 4.—An improvement on Plot 1.

Plot 5.—The vraic and guano did not produce the result anticipated. The disease commenced early in this plot, and, aided by a dry easterly wind, the foliage was destroyed before their growth was perfected. Other circumstances induce me to think that vraic is a manure too cold and wet for the well-doing of the potato. They did not come up so soon as in the other plots, although planted at the same time.

Plot 6.—These were also longer breaking through the soil, and at the period of taking up were half of them diseased. The remainder were excellent in flavor.

Plot 7.—This crop was splendid in appearance and good in flavor. Very few small or diseased. That quantity of guano did not produce so much foliage as I expected. Possibly, it might be owing to the greater distance allowed from plant to plant, to prevent their being drawn. Indeed, when any soil is heavily manured, the distance of the plants is a point of the utmost importance, particularly with a manure like guano, and to the overlooking of this essential point may often be attributed the failure of a crop.

Plots 8 and 9 produced a fine sample.

Plot 10 was remarkably fine and large, with very few small or diseased. The foliage kept healthy to the last. Taking all things into consideration, I have not seen the like this season.

The potatoes manured with sulphate of magnesia and nitrate of soda (about 75 lbs. of each per *vergée*) were large and extremely white, but watery and very bad-flavored. These two manures I should not recommend to be used in the cultivation of the potato. The potash and nitrate of potash, tried in different plots, produced no result worth recording. I was somewhat disappointed in this, as the tuber is a potash-plant, the stem and foliage a lime-plant. However, I intend experimenting with these two manures next season in another way on the same description of crop, and I trust with better success.

Nitrate of Soda on Wheat.

The nitrate of soda had an astonishing effect on the wheat plant, causing a beautiful and luxuriant blade, with large and heavy grain. The change in the color of the plant was perceptible in 24 hours after the application. The quantity used was 50 lbs. per *vergée*, without any other manure, applied in March. The cost of this manure was 21s. per cwt.

Superphosphate of Lime for Root Crops.

Although superphosphate of lime was but of slight service as a manure to the potato, such was not the case when used for the growth of the carrot. I found that 2 cwt. of superphosphate and 2 cwt. of guano per *vergée* produced much finer roots than I got from land adjoining manured with 15 tons of the best stable-dung. Turnips also grew large and fine with a dressing of 150 lbs. of superphosphate and 125 lbs. of guano. These two manures appear quite congenial to the turnip. It is better, however, to apply a larger quantity of superphosphate than of guano, as the latter has a tendency to produce too much foliage.

A piece of land situated near me was, according to my direction (it being in very poor condition) dressed with 5 cwt. per *vergée* of superphosphate, and afterwards sown in yellow-bullock turnips. This has produced a crop that, for size and weight, will not be equalled in Jersey.

Mangold-wurtzel, beet, and parsnips, roots of great value to the farmer, will grow considerably larger on land manured with superphosphate and dung, than

with a larger quantity of stable-dung alone; and from observations made during this year on the various crops grown in a large market-garden with different manures, I am certain that superphosphate of lime, judiciously applied, exercises an important influence in the growth of these roots, and will not fail to give a satisfactory return.

How to Apply Artificial Manures.

To those unacquainted with the use of artificial, or, as they are sometimes called, hand-manures, I may say that my experience in them leads me to think the following are the best methods:

GUANO—*for Potatoes*, in two or three applications, when the young plants are just above the surface, and hoed in—*for Turnips*, sown broadcast and harrowed in before sowing, that the seed may not come in contact—*for Wheat*, plowed in: if guano is sown in March or April, it is found to produce too much straw and light ears, but not otherwise—*for Carrots*, and other root crops, well mixed with the surface soil, by thin plowing, and a good use of the harrow; then digged in.

SOOT—*for Potatoes*, sown broadcast at the time of planting, and harrowed in: it assists in darkening the soil and produces an earlier crop.

SUPERPHOSPHATE OF LIME—*for Turnips* or *for Wheat*, for which it is a valuable manure, should be sown in drills with the seed, but where the drill-system is not adopted, it can be sown broadcast as soon as the land is prepared for the seed—*for Carrots*, and other roots, it may be used in the same way as guano. It is supposed by some that superphosphate of lime, sown in drills with the seed, gives an impetus to the young plant, that it may grow away from the ravages of the black flea (*Haltica nemorum.*) In my experience I never found it a sufficient or even a partial remedy for the evil. Several times this summer I had large beds in cabbage and turnip seeds, manured with the superphosphate of lime. The quantity of seed used was at the rate of 10 lbs. per vergée. In consequence of the frequent failures, I used that quantity, thinking to have sufficient left after the black flea; but, no; three times I saw the beds destroyed in four hours; therefore I question if there is any manure that can force vegetation out-doors to out-grow the ravages of this small but powerful pest.

BONEDUST—*for Turnips*, should be harrowed in before the seed—*for Clover*, inch-bones are preferable, plowed in when preparing for wheat. If not done then, bonedust should be substituted and applied any time during winter, and well rolled in. For any of the root crops, it may be treated in the same way as guano; but, previously to so doing, it ought to be made into a compost with earth, and well moistened, some months previously to using. Further, any manure having volatile salts should be applied during moist weather; otherwise, a loss of the most valuable part is the consequence. J. LEVESQUE, JR. *Island of Jersey, Oct.* 21, 1856

Horse Distemper and Heaves.

MESSRS. EDITORS—In a late No. of the Cultivator, there is two inquiries about horse diseases, for remedies for heaves and distemper. There are many things very beneficial, but the most effectual in my knowledge, is to take the lobelia, gathered before frost comes in the fall, dried and pulverized with an equal quantity of salt petre, to be given in his feed twice a week—a large table spoonful each time, for a few weeks, and it will relieve and restore often when a horse is thought to have a disease fastened upon him. Good bright oat or barley straw is the best fodder for preventing this malady.

As for sheep and lambs eating each other's wool. For a remedy rub a little fresh tar on the places eaten, and it has always proved beneficial. It is often done by young lambs in winter season. H. A. *Scipio, N. Y.*

Application of Barn-yard Manures.

MESSRS. EDITORS—I am one of the many readers, that you imagined would be surprised to learn how so good a farmer as Mr. JOHNSTON applies his barn-yard manure. That he raises very fine crops of corn in his way, I can readily believe, because I have seen good crops raised by planting on merely inverted sod, and certainly the addition of manure, in his way, would add materially to the crop; and also because I am confident that Mr. Johnston would not persevere in his plan unless he did raise good crops. At the same time, it does not necessarily follow that his plan is the most economical way of applying manure.

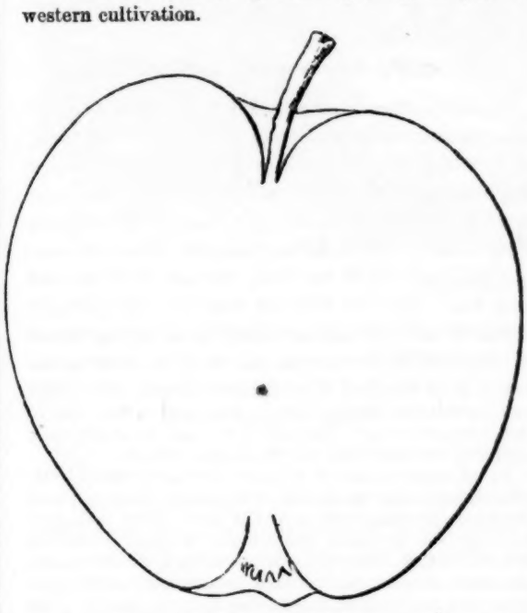
When I commenced farming in this country twenty years ago, I used to heap up my manure, I suppose because I had always done so in England, but for fifteen years I have adopted a different plan, and like our friend, Mr. Johnston, I do not feel disposed to change it until I see my neighbors raise better crops by some other plan. As soon as I have finished spring sowing, I draw my manure out of my yards onto the land intended for corn, taking pains to have it well shaken and evenly spread, and plowed under as quickly as possible.

After speaking of plowing the manure in the bottom of the furrow, Mr. Johnston adds: "where it would be of little if any use in our dry seasons." Now my experience is just the reverse of this; in fact it is on the very account of our dry seasons that I deem it so very advantageous to plow in fresh manure. When I say fresh manure, I do not mean such stuff as we too frequently see dotted about a field, here a load and there a load, which in fact is little better than dry straw. But I mean good solid manure, full of rich juice, which it will be, if properly manufactured in a well shaped and regularly littered yard. Let such manure as this be evenly spread and quickly plowed under, and I maintain, without any fear of being called a theorist, that it is a more economical way of applying manure than to let it lie so long on the top of the ground, "wasting its fragrance on the desert air."

In a sensible letter on this subject in your last publication, subscribed "A READER," occurs this sentence: "It may be laid down as a universal rule, that stable manure, to be applied in the most efficient manner, should be perfectly intermixed with the soil, at precisely such a depth as the roots of plants go in search of nutriment." Now would not this be a difficult operation? Years ago JETHRO TULL, who was styled the father of drill husbandry, made an experiment on this subject in regard to Swedish turnips, which experiment was republished by Cobbett in his English Gardener, in 1829. He proved that their roots must have extended a yard all round; this is laterally; there is no mention of depth. But this was tested with wheat about 25 years ago by LORD VERNON, an account of which I have never seen in print, but I had the fact from his own lips. He had long been urging his tenants to adopt a system of deeper cultivation, but without effect, as his tenants persisted that they plowed already as deep as any roots would go. To settle the point, Lord Vernon put soil into a large barrel, three feet deep, and sowed it with wheat. When it was ripe, he called his tenants together, and had the barrel taken apart, when he convinced them by occular demonstration that the roots had penetrated to the bottom of the barrel, where they had formed a web of fibres. How much farther they would have gone, had the barrel been deeper, deponent cannot say, but it is quite evident that there need be no fear of plowing manure in so deep that the roots of plants cannot search it out. C. B. MEEK. *Canandaigua, N. Y., Dec.* 1, 1856.

Western Apples.

The selection of the best varieties of the apple for cultivation throughout the great west, is becoming an object of rapidly increasing importance. The difficulties found in the way of the successful cultivation of other fruits, give the APPLE there greater prominence; and the large cities which are springing up in all directions, and the millions which have already peopled that vast region, are calling for a supply of good fruit not likely very soon to be filled. Our numerous readers there, who may be interested in fruit culture, and those elsewhere who are connected with the business of furnishing fruit trees, or with the fruit trade, may be glad if we devote a small space in a few of our numbers, to figures and descriptions of some of the best or most valuable western apples, or those likely to become the leading sorts. The list will not, however, include such only as have originated there, but will embrace some eastern sorts that have proved especially adapted to western cultivation.



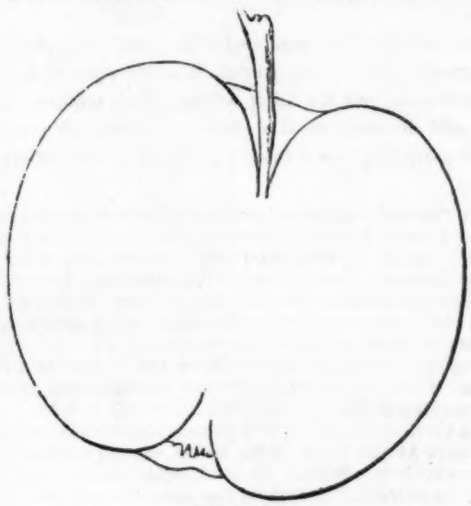
CAROLINA RED JUNE.

CAROLINA RED JUNE. Size medium, sometimes rather small, oblong-ovate, somewhat uneven, very smooth, scarcely ribbed, tapering to each end, but most to the blossom end; skin with nearly the whole surface a deep red approaching a purplish red,—where much shaded, a whitish skin; stem small and from one-fourth to three-fourths of an inch long, in a small and narrow cavity; calyx in a small and wrinkled basin; flesh quite white, fine-grained, tender, rather acid, moderately rich. It is quite early, and continues to ripen for several weeks. It is remarkable for its *keeping* qualities after ripe—a proof of which was furnished by the fact that several ripe specimens sent by J. C. TEAS, of Indiana, all arrived sound after a long journey.

It is believed to be identical with the *Blush June*, although regarded as different by some, on account of the former being striped and the latter not. Some varieties, however, (as the Fameuse, to which this is evidently allied,) are variable in this particular, being sometimes distinctly, and at others quite obscurely striped.

The Carolina Red June has proved the most valuable early apple for Northern Illinois and adjacent regions. It is a fine erect grower, very hardy, and bears young and abundantly. A young tree loaded with its showy crop is a beautiful object.

This variety does not appear to be noticed in Elliot's Western Fruit Book, although fully described two or three years previously in the American Fruit Culturist. It was introduced into the West from North Carolina.



SWEET JUNE

SWEET JUNE. Known by this name in Indiana, Illinois, and Wisconsin, and apparently the same as the *Summer Sweet* of Southern Ohio, and as the High-top Sweeting of Massachusetts.

Size, usually rather small; nearly round, slightly flattened at the ends, smooth, nearly regular, pale yellow when ripe; stem rather long and slender, in a small, even cavity; basin even, small and shallow; flesh fine-grained, sweet, not very rich, "good." The tree is of upright growth, and is a young, uniform, and profuse bearer in all localities, which render it a valuable sort.

(To be continued.)

Cutting Grafts.

There is no better time to cut grafts than at the commencement of winter. In cutting and packing them away, there are some precautions to be observed. In the first place, let them be amply and distinctly labeled, as it is very annoying to find the names gone at the moment of using them. For this purpose they should be tied up in bunches, not over two or three inches in diameter, with three bands around each bunch —at the ends and middle. The name may be written on a strip of pine board or shingle, half an inch wide, a tenth of an inch thick, and nearly as long as the scions. This, if tied up with the bunch, will keep the name secure. For convenience in quickly determining the name, there should be another strip of shingle, sharp at one end, and with the name distinctly written on the other, thrust into the bundle with the name projecting from it. If these bunches or bundles are now placed on ends in a box, with plenty of damp moss between them and over the top, they will keep in a cellar in good condition, and any sort may be selected and withdrawn without disturbing the rest, by reading the projecting label. We have never found sand, earth, sawdust, or any other packing substance, so convenient, clean, and easily removed and replaced, as *moss*, for packing grafts. It is needful however, to keep an occasional eye to them, to see that the proper degree of moisture is maintained,—which should be just enough (and *not a particle more*,) to keep them from shrivelling. They must, of course, be secure from *mice*.

Plum grafts, which are sometimes injured by intense cold, are generally better if cut before the approach of the severest weather, and securely packed away.

Good Seed—Where to Look for it.

It seems to me that sufficient importance is not given to the great fact, that seeds ripened in a cold climate are more perfect than those ripened in a warmer region.

Not only is there more excitibility and consequently greater germinating powers in seeds ripened in a cold climate, but the *habit of the plant* acquired in the cold climate gives it a greater seed-producing and seed-perfecting power than if grown in a warmer climate.

In the cold regions nature exerts her energies in the production of the seed; in the warm climate she glories in the size of stalk and leaf. Indian corn, which near Montreal, can be brought to produce one hundred and fifty bushels to the acre, has a very small stalk and leaf, compared with the same plant grown in Georgia, where great skill in cultivation can scarcely bring the production above 50 or 60 bushels to the acre. In the Northern States and Canada, corn may be planted in hills so close that 5,700 hills to the acre, with three stalks in the hill, producing on an average 1¼ ears to the stalk, with entire success; while in Georgia the production on land of the same quality will be about 2,500 ears to the acre, taken from 2,500 plants, standing singly, in hills 5 feet by 4 apart. The grain from the northern field will weigh from 2 to 3 times as much per acre as that from the southern, whereas the plant, without the grain, in Georgia, will weigh much heavier than in Vermont.

The annual crop of Indian corn in the United States averages not less than eight hundred millions of bushels. If the seed should be procured some two or three degrees of latitude north of the place of planting, and planted in hills or drills at a distance adapted to the habit of the plant in its northern clime, allowing for a moderate change of habit, the crop would probably be greater, by one-eighth—or one hundred millions of bushels. The average crop of wheat is about one hundred and forty millions bushels. Well selected seed taken from the colder climate would enlarge it some twenty millions. Oats are grown to the amount of one hundred and seventy millions bushels. This crop might be increased some 20 or 25 millions by the same means.

And so of other grains and most root crops. From one hundred to two hundred millions dollars, the people of this nation might add to the value of their food crops, by an expenditure for the best seed, scarcely exceeding one per cent. on the increased amount; and this merely a transfer from one set of farmers and planters to another.

The railroad interest, too, would participate largely in the benefit of this annual transportation of seed from north to south, not alone by freight on the seed, but also in transportation, in many instances, from south to north and from west to east of the augmented surplus resulting from the use of superior seed. The other modes of transportation would also come in for a share of the benefits to accrue from the general adoption of this plan for augmenting our crops.

As some of your readers may need facts to convince them of the superiority of a cold climate to perfect the seeds of our food-producing plants, I will give the result of my examination of the U. S. Census returns of 1850, taken as to crops for the year 1849. This does not give all the difference which a series of years would show in favor of the colder States, as the crop of the north-western States that year was smaller than for many years before and after. But from those returns I have made, and I give below the average crop per acre of the cereals for the cold States and the warm States, as also of the three intermediate States, Delaware, Maryland and Missouri. The cold States embrace all northward of Delaware, Maryland, Kentucky and Missouri, and the warm States all the others except the three Middle States above named:

Average bushels per acre of

	Corn.	Wheat.	Oats.	Rye.
The Cold States, ...	31 1-7th	12⅕	26 1-5th	15½
The Warm States, .	18	8⅔	14⅗	9
The Middle States, .	25⅗	11⅔	22½	not given.

A writer, HAMILTON, in the Nat. Intelligencer of June 1855, whose article is copied into De Bow's Review for August of that year, gives a table of the productive industry of the different sections of our country, based on the Census of 1850, in which table, among other similar deductions in favor of the cold States, he makes the following, proceeding regularly by sections from south to north:

1. That the farms diminish in size; that they increase in proportion of improved land; that the cash value regularly increases, irrespective of density of population; that the production of Indian corn and wheat increases regularly from south to north; that the productive industry of the U. S., per capita, follows the same law; and that the density of population and the ratio of increase are of course favorably influenced for the cold States by these controlling elements. J. W. SCOTT. *Castleton, N. Y., Nov.* 27.

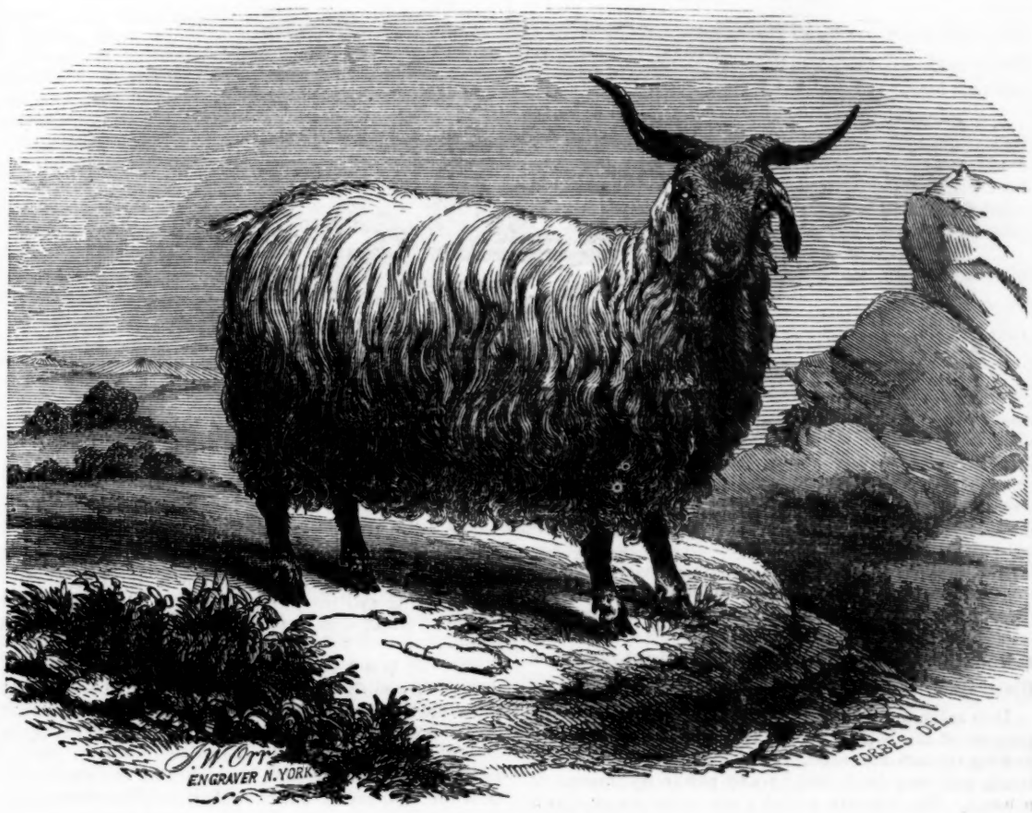
Banking Up Permanently Against Trees.

Occasions often occur where it is desirable to make make permanent embankments over the roots of trees, as in filling up hollows in grading, &c. We receive frequent inquiries as to the amount of injury likely to be sustained in such cases. We have seen fruit and other trees, twelve or fifteen years old, where the surface had been raised two feet, continue to thrive and grow well. The soil however was of a light gravelly character, and not such as to keep the bark, long inured to light and air, in so close and damp a condition as would have resulted from a more compact soil. The roots, although deeply buried, had still a fine bed of rich earth to spread themselves in; and no doubt they soon sent up fibres into the new earth above.

In all cases where it becomes necessary to embank with heavy soil, we should recommend placing small stones or coarse gravel next the tree, which will give both air and dryness; and a layer of small stones on the old surface, covered by inverted turf, would tend to the same result, yet it would be attended with more labor and probably be less useful, than the portion piled immediately in contact with the trunk.

Bee-houses not Necessary.

EDITORS CO. GENT.—In the last number of your paper I noticed a request from a Mr. CASE of Troy, Bradford Co., Pa., for a plan for a bee-house; among other things, to be large enough to hold from twenty to twenty-five swarms. Various plans have been tried in this neighborhood and all have failed. Let me recommend to Mr. Case to abandon the idea of a bee-house entirely. Depend upon it, he will not succeed. The bees become too numerous, and consequently require too much honey to be kept on hand for winter food. And not only so, but a bee-house of a few years standing becomes a *pest* to a neighborhood. The bees become so numerous and strong, that not a hive within two miles can be kept from being robbed by them. I would recommend to Mr. Case, Kelsey's Alternating Bee-hive, patented May 9th, 1849; and instead of one house holding twenty swarms, have those twenty swarms separately housed in twenty boxes. D. S. *Pennsville, Pa.*



Female Cashmere Goat.

The property of RICHARD PETERS. of Atlanta, Georgia, imported during the year 1849, from Turkey in Asia, by J. B. DAVIS. M. D, of South Carolina. Live weight, 102 lbs.; weight of yearly fleece, 4¼ lbs.

Three Recipes for Cakes.

[We can recommend the following from personal trial EDS. C. G.]

SILVER CAKE.—Stir to a cream one cup of butter with two of sugar; add the whites of six eggs beaten to a stiff froth, one cup of milk with one-half a tea-spoonful of soda dissolved in it, and flour so as to make it as stiff as pound cake. With the flour stir in one tea-spoonful of cream tartar. Flavor as you please with lemon, nutmeg, or rose water.

GOLD CAKE.—Stir to a cream one-half a cup of butter with two of sugar; add the yolks of six eggs well beaten, and, if you like, the whole of another; then add one-half a cup of sweet milk, with one half a tea-spoonful of soda in it. With the flour put in a tea-spoonful of cream tartar. This should be as stiff as cup-cake. A tea-spoonful of cloves, one of cinnamon, and half a nutmeg, with raisins or currants, or both, is considered by some an improvement.

MEASURE CAKE.—One cup of butter, two of sugar, three eggs, one-half a tea-spoonful of soda in a cup of milk, one tea-spoonful of cream tartar, and five cups of flour. Stir the butter and sugar to a cream, add the eggs, the whites and yolk beaten separately; then the soda and milk, and lastly the cream tartar and flour. Flavor as you please. Bake in small tins or in a loaf. A. A.

Orange and Christina Melons.

Considerable has been said pro and con, about the "Orange Watermelon." I have had two years experience with its cultivation—and also the "Christina Melon." They have proved equal to all that has been said in their favor. Rich and luscious, they have won a good name by all who have tasted them.

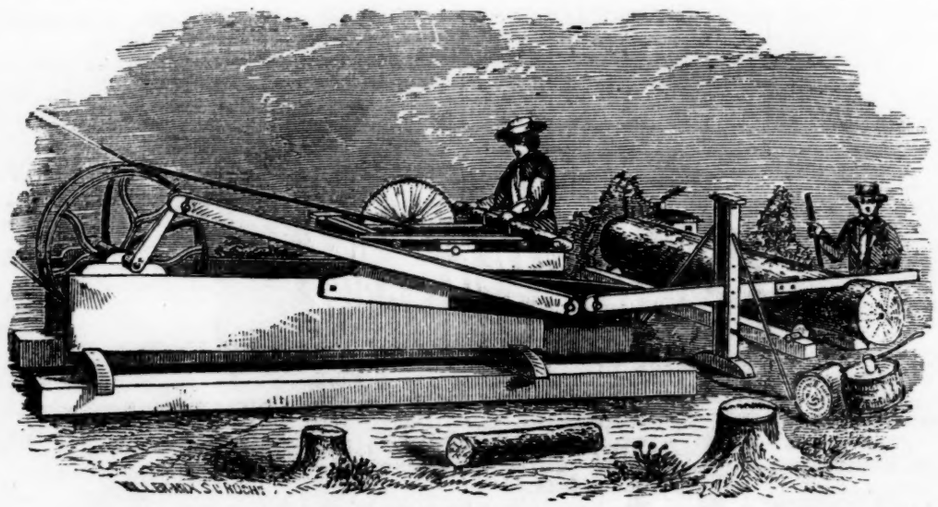
Any person wishing seed can be supplied by sending six cents in P. O. stamps, and I will send enough to begin with. But all who raise vines ought to know they will mix, and to keep pure must be planted twenty or more rods apart. Thousands of dollars would be saved every year if proper care were taken in raising seeds. A. S. Moss. *Fredonia, N. Y.*

Hardening Tallow for Candles.

MESSRS. EDS.—How can I harden tallow that is rather soft, so as to make hard mould candles? L. C. *Monroe Co., N. Y.*

We have been informed that a small portion of alum or of rosin, (the former preferred,) will harden tallow for candles, but we cannot give the process. Will some of our correspondents, skilled in housewife matters, please give us the necessary information, and likewise say whether such candles are valuable?

What is the worst kind of fare for man to live on? Warfare.



EMERY'S DRAG CROSS-CUT SAW MILL.

Emery's Drag Cross-Cut Saw Mill.

Having received several inquiries for a horse-power saw mill for sawing wood, we have obtained the above illustration, which is described as follows:

It is intended for cutting off logs of any size for the purpose of lumbering, for making shingle bolts, or for sawing up into fire-wood. It is a distinct machine of itself, and may be driven by any power by means of a band. The logs are rolled upon some ways, which have rollers and a small truck, by means of which the logs are rolled forward for each cut made by the saw. The machine has a sett of slides with a cross-head, carrying two wrist-pins, one of which engages the connecting rod from the crank, while the other engages with the shaft of the saw itself. This moves at the rate of about 100 revolutions per minute, and is capable, with the power of one horse, of making from 20 to 30 cord cuts per day, or what is called face cord cuts, 4 ft. by 8. They are extensively in use in the timber section of Michigan, Ohio and Kentucky, and coming rapidly into use generally.

The cut above also shows an additional attachment which is often added, and is used for a circular saw mill for cutting small wood or ripping boards, &c., for fencing and building purposes.

The above machine was awarded the first premium for horse-power use, at the late New-York State Ag. Fair at Watertown.

Price of the entire machine, including saw, ... $40·00
" when combined with the circular saw, table, &c., ... 40·00

Making for both, ... $80·00

Emery Brothers, of this city, are manufacturing them, and will give any further information which may be desired.

Oil-Producing Seeds and Plants.

Perhaps the following items may prove germs of some future improvements in our systems of rotation or lists of profitable crops.

Rape, which is very extensively cultivated in France, Belgium, and Holland, for the seed, has also been profitably grown in England for the same purpose. The experiments which have been made in raising it at Boxted Lodge, county of Essex, show that the cultivation of rape for seed could be *profitably* prosecuted. During this season about £20 (or nearly $100) per acre, has been realized. Whether it could be profitably raised in *this* country can only be determined by repeated trials, which, to be safe, should be on a small scale.

The fact is not very extensively known, we presume, that the Swedish turnip (ruta baga) produces nearly the same amount of seed as the rape plant, and that the seed of the former yields nearly as much oil as the seed of the latter. While the price of turnip seed is as high as it is at present, there will be no substitution of it for rape seed; but in a change of circumstances this fact might be turned to some good account.

Between Dunkirk and Paris, the white poppy appears to be gradually taking the place of rape as an oil-producing plant. It appears that the quantity of seed from the white poppy exceeds that from the rape plant, while the per-centage of oil from a given weight of seed is also higher—*being about double that obtained from flax-seed*. If the seed of the white poppy should prove equally rich in oil, when grown in this country, the enterprise of those who should first venture upon its cultivation might secure an abundant reward. In addition to its utility, a field of white poppies in flower is said to be an object of remarkable beauty.

Selecting Corn and Potatoes for Seed.

"Like produces like," is an axiom often quoted in favor of the selection of the best seed for planting. Where a new variety—a *new* individual is to be produced, nothing can be more true. Every time, for instance, that *seed* is planted—(and by "seed" we mean the ripened grains produced from flowers, as with corn, wheat, and turnips)—a *new* and *distinct individual* is afforded from every seed planted; and if these seeds are liable to vary in their products, (as with the *apple*,) a *new variety* is produced by each. Some vary much less than others. The different sorts of wheat, for instance, produce the same when sown, for many successive generations, with scarcely a shade of variation. A very slow change, however, does actually take place, and a few rare plants may be found, among the millions in a large field, which have varied considerably from the seed sown. By selecting these rare seeds only, planting them, and then observing the same course with their product, new and distinct varieties are obtained.

The same result takes place by the careful selection of the seed of corn. By continually selecting the ears

soonest ripe, early sorts are procured; by choosing the largest ears only, large varieties are obtained; and by taking those exclusively where several ears are found on a stalk, prolific sorts become permanently established. It is much easier to select seed corn, in this way, than seed wheat; and the practice should be adopted by every farmer.

Reasoning from analogy, many suppose it to be equally important to select *large potatoes* for "seed." But a great point of distinction is here overlooked. In planting a crop of potatoes, *new* individuals are not yielded. The *tubers*, which are only an enlargement of that portion of the stem beneath the soil, furnish eyes or buds, and the *same* variety or individual is increased and extended, but no new one is produced. A pink-eye potato was in the first place obtained from seed taken from the ripened balls. It thus became a distinct variety or individual. But the operation of cutting and planting the tubers, is only an extension or multiplication of the *same* individual—the result is still pink-eye potatoes, without the slightest shade of variation—no more than if the original plant was allowed to grow without disturbance, until it had become a large stool of many plants. An Isabella grape may be multiplied by *layers*—but every plant thus produced is only a *portion* of the parent. It can never, by this process, become a new sort. The same result takes place in budding or grafting. A Baldwin apple tree may bear ten thousand buds. These ten thousand buds may be taken from it and each inserted into a separate stock or seedling, and thus ten thousand Baldwin trees be obtained. But every one will be only a *portion* of the same original tree—and no variation whatever will take place in any point of character from the parent. But if *seed* from the apples be sown, new individuals, new varieties are at once obtained.

For the reasons already given, it is far less important to select large potatoes for planting, than to make selections of the best ears of corn. In one point of view, it is of no consequence whatever, whether large or small potatoes are planted. We know several skillful cultivators, who have supplied the market for many years with the largest and finest potatoes, who say there is *no difference whatever*. We think, however, there *may* be a difference; and it sometimes becomes of some importance. Small potatoes, for instance, under ordinary management, will yield stalks more abundantly from their more numerous eyes; and the product will consequently be more in number, and smaller in size. Again, when the ground is very dry, large tubers will furnish a longer supply of moisture to the young plant, giving it a more vigorous start. A variety, likewise *may*, by long continued bad cultivation, become constitutionally enfeebled, just in the same way that a tree may become stunted, and require some years and favorable influence to restore it. We think, however, that the result is very small or very rare, so far as the potato is concerned.

On the whole, therefore, while we would urge, as of great importance, the practice of choosing the largest or earliest ears of corn for seed (and in fact the best of any grain or seed produced from flowers) we are compelled both by theory, and from the practice of many experienced and skillful cultivators, to regard this practice as relates to potatoes as of far less importance; and by avoiding too thick a growth of stalks, or a dry soil, of very little consequence whatever.

WILLIS' IMPROVED STUMP MACHINE—Manufactured at Orange, Mass. The above machine, which seems to stand without an equal, for power and speed in pulling stumps, has a wonderful sale abroad as well as at home. We are told the inventor has just answered an order for sixteen for the Valparaiso market; these, together with others, make some fifty or more shipped for that region within one year. It argues well for those semi-barbarous regions that they are ousting their stumps. PROGRESS.

Purely Bred Animals.

Mr. R. A. ALEXANDER of Woodburn Farm, has written an interesting letter to the Louisville *Journal* on the advantages of breeding from purely bred animals. He aptly defines

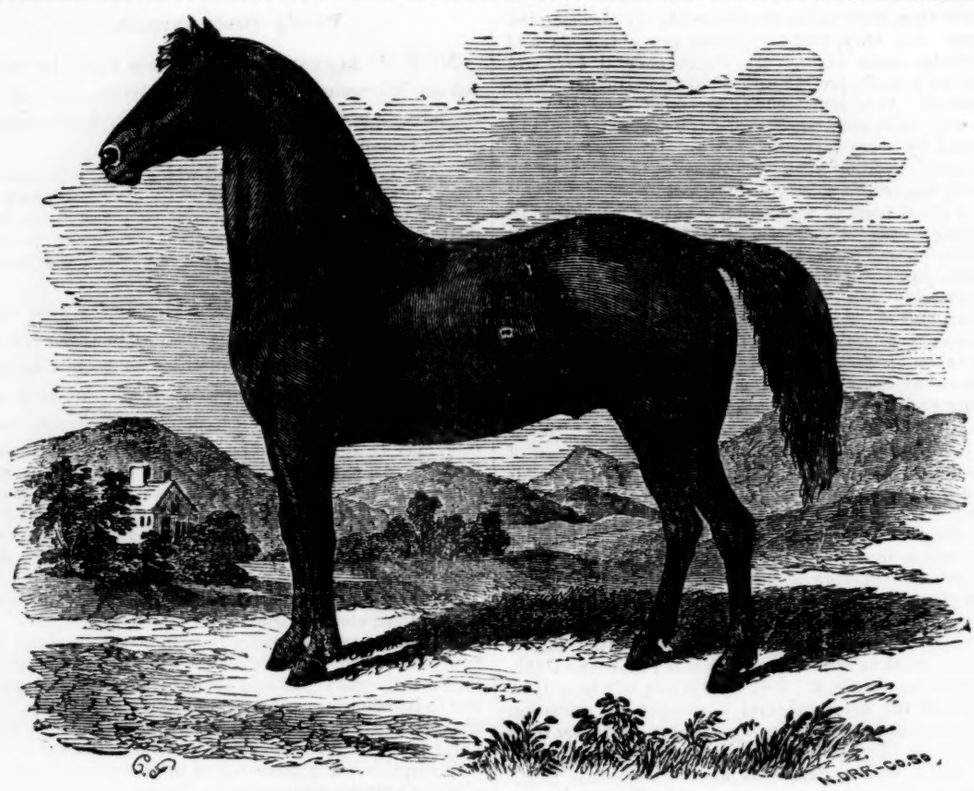
"An animal as purely bred which itself possesses all the points and characteristics of the breed to which it claims to belong, which has inherited the points and characteristics from its progenitors, male and female, and which we have every reason to believe, will transmit them to its offspring."

The value of the pedigree of an animal, as he very justly remarks, "can only be duly estimated when we know whether or not the qualities we require in that animal, of whatever sort or breed it may be, have descended through several successive generations, until they may be supposed to be inherent in that particular family. An extended pedigree may, therefore, be considered of little value unless we are satisfied that the long list of names includes none but good animals; and were more attention given to this circumstance, breeders might not unfrequently save themselves much disappointment."

He then goes on to speak of the importance of breeding common stock to good bulls:—

"That an animal, belonging to a family bred for many successive generations with a view to perpetuating certain good qualities, should transmit these qualities to its offspring, is by no means extraordinary, but the marked change produced by a single cross of a purely bred animal on one of inferior breeding might well surprise one unaccustomed to observe such things, and can only be accounted for, by supposing that the parent of inferior breeding, having no marked characteristics inherent in the family in which it belongs, and therefore no particular type after which to breed, yields in this respect to that (parent) of which the characteristics are distinctly marked, and the offspring is, therefore, found to resemble most strongly the well-bred parent. The improvement, thus effected, is frequently so marked as to have led to the expression, "that the first cross is the best," by which is meant that the offspring from the first cross is superior to the offspring of the second or third cross, or that the half-bred animal will be found superior to that having three-fourths or seven-eighths of good blood. To this, however, I cannot agree, as I am strongly of the opinion that each succeeding cross with the purely bred animal will cause an improvement, though, as there is not the same room for improvement after the first cross, it cannot be so easily observed.

"The high state of improvement to which well bred animals have been brought, would render it most desirable that this class of stock should become generally distributed throughout the country, but the skill and unceasing care necessary to breed and keep them up in perfection, the time that would be required to substitute them for the numerous varieties now found throughout the country, to say nothing of the expense of acquiring the purely bred stock in the first instance, must almost preclude the idea that such can ever be the case, and probably here, as in England, the rearing of this sort of stock will be confined to comparatively a few breeders. We are, therefore, constrained to look to some other mode of improvement, and none so strongly recommends itself as the crossing the females of the common stock of the country with the males of the improved breed. The well ascertained fact that the sire has more influence in the shape and general appearance of the progeny than the dam, would suggest this plan of improvement, and, when males of high character and breeding, such as are above termed purely bred animals, are used for this purpose, the improvement is so rapid as to leave little to be desired by the enterprising farmer."



The Original Justin Morgan Horse.

MR. LINSLEY, in his interesting "History of Morgan Horses," which we noticed last week, gives the above as a "faithful representation" of the original Morgan Horse, from which the whole race of Morgans have descended. Its general correctness is certified to by several persons now living, who were familiar with him. The true history of this horse is undoubtedly as follows: He was foaled in or near Springfield, Mass., in 1793, and taken, when two years old, by Mr. JUSTIN MORGAN, by whose name he was afterwards known, to Randolph, Vt., where he was owned and kept by Mr. Morgan until Mr. M.'s death, which occurred in 1798, soon after which he passed into the hands of Wm. Rice, of Woodstock, Vt. His future life and exploits, or such of them as could be collected at this late day, are graphically and we doubt not correctly described by Mr. LINSLEY in his book. He lived, though hard-worked most of his life, to the age of 29 years, having died in Chelsea, Vt., in 1821.

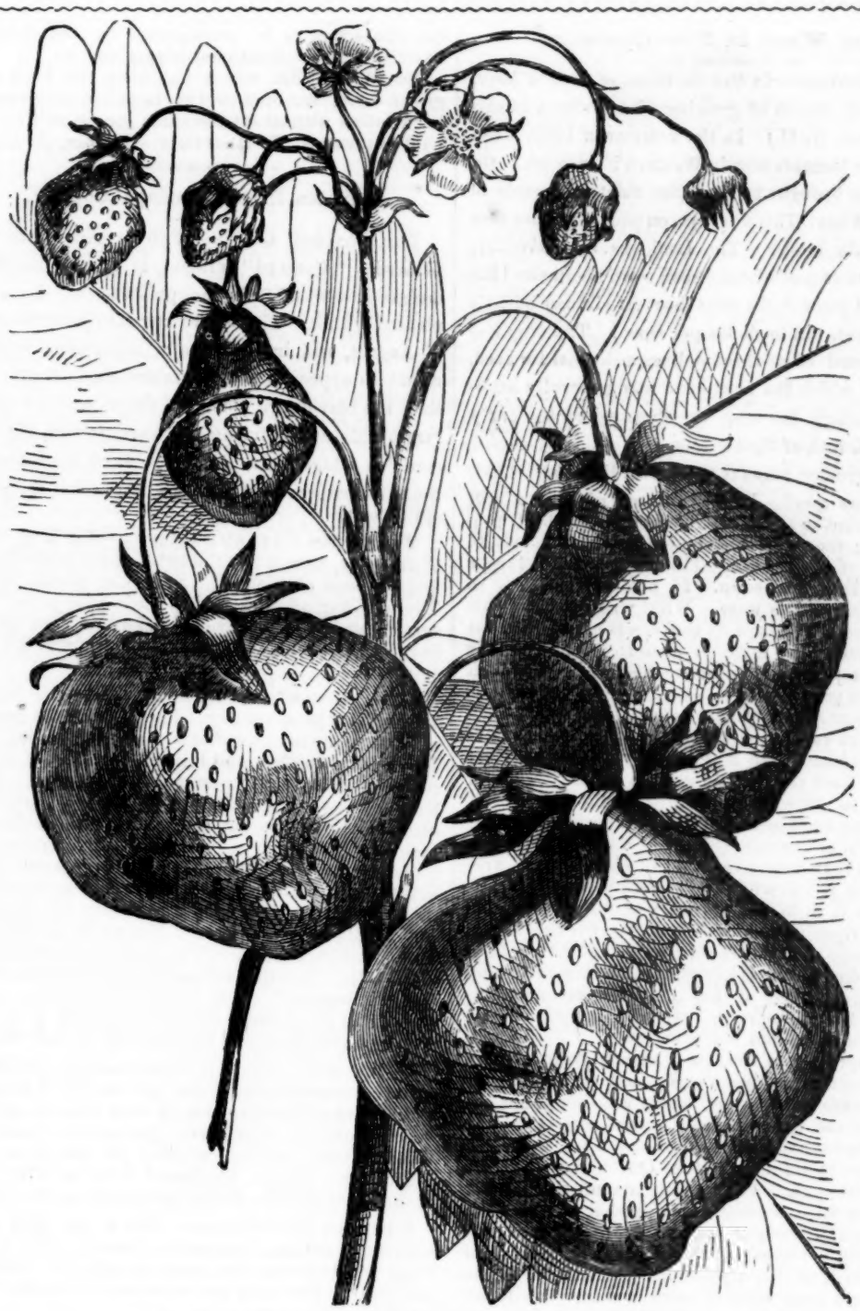
That the sire of the Justin Morgan horse was a horse known as "True Briton or Beautiful Bay," there can be no doubt. The sire of True Briton, there is every reason to believe, was the imported horse "Traveller," and his dam, according to an advertisement which Mr. LINSLEY has found in the Conn. Courant of 1791, "De Lancy's imported racer"

MORGAN HORSES: A Premium Essay on the Origin, History, and Characteristics of this Remarkable American Breed of Horses; Tracing the Pedigree from the Original Justin Morgan, through the most noted of his Progeny down to the Present Time. With Numerous Portraits. To which are added Hints for Breeding, Breaking and General Use and Management of Horses, with Practical Directions for Training them for Exhibition at Agricultural Fairs. By D. C. LINSLEY. New-York: C. M. Saxton & Co.

After considering the most esteemed races of the Horse, and the kinds of service to which they are adapted; the difference between that service as it has been and is at the present day, and the kinds of Horses now most sought for, Mr. Linsley argues that the Morgan furnishes the breed peculiarly adapted to our wants on the road and for general use. He then traces out the origin of this breed, quoting largely from the correspondence on the subject which first appeared in our columns, as long ago as 1841, and summing up from it all that will probably ever be known on the subject. The remainder of the volume is well summed up in the title page above. The illustrations are numerous. Every owner of Morgan horses should have this book.

REPORT OF THE PEESIDENT of the Virginia State Agricultural Society, made to the Farmers' Assembly at the First Annual Meeting, held in the city of Richmond, Oct. 28, 1856.

HON. PH. ST. GEO. COCKE has sent us his report at the conclusion of the Virginia State Society's first year under its new constitution,—in which the main novelty is that an elective representative assembly is provided for, chosen by counties and districts, to take the place of the Society's ordinary mass meetings. Other States besides that for which this report was intended, may perhaps learn something from its dignified views on the influence the farmer should exert and the part he should take in public affairs; from its strong stand in behalf of popular education in general, and, finally, from its able advocacy of and well digested plans for a system of higher Agricultural Education for the farmer in particular. How much in earnest Mr. C. was in pressing these points upon the Assembly, may be inferred from the fact already published in our columns, that on conclusion he offered as his subscription towards endowing an Agricultural College in connection with the State University, a check of $20,000.



Peabody's New Hautbois Seedling Strawberry.

The engraving can convey but faint idea of the beauty of this truly wonderful plant. I produced this new seedling, by crossing the Ross Phœnix with a wild Strawberry of Alabama. It is hermaprodite in its character, producing fruit without the aid of an impregnator, being a capital impregnator itself for pistillate varieties. It is a hardy, vigorous grower, withstanding both cold and heat without injury. In good soil the vine grows to an enormous size—we have single plants that cannot be covered with a half bushel measure. The fruit is borne upon tall stalks, suspended on stems from three to five inches long, attached to the calyx by a polished coral-like neck, without seeds, there being very few seeds in the berry. It is of singular and beautiful form, somewhat irregular, and sometimes compressed, of the largest size, frequently measuring seven inches in circumference; flesh firm, melting and juicy, and of the most exquisite pine flavor, requiring no sugar for the dessert, rivaling the far-famed Burr's New Pine. It is a prolific bearer, opening its blossoms during the mild days of winter, and perfecting its fruit as soon in the spring as the weather will permit. When fully ripe, the color is of a rich, dark crimson. But its rich color, beautifnl form, magnificent size, and exquisite flavor, are not all its recommendations; through its firmness and lack of acidity, it bears transportation better than any strawberry ever yet introduced. We have produced many hundred seedlings and have in cultivation all the fine varieties of Europe and America, but have never seen anything to compare with our new *Hautbois Seedling*. C. A. PEABODY. *Columbus, Ga.*

Winter Wheat in New-Hampshire.

MESSRS. EDITORS—In the Co. Gent. of 29th of May, I gave a short sketch of growing winter wheat in this town, (Warner, N. H.) In the summer of 1852, a son of one of our farmers was in Western New-York. On his return he brought in his valise thirteen quarts of white Flint Wheat. This was sown on one third of an acre of "pine-plain land." The land was in a favorable condition for a crop of wheat—seed sown about the 10th of Sept., and yielded the next harvest sixteen bushels of prime wheat, (48 busheles per acre.) The crop was readily disposed of at three dollars a bushel for seed. The yield of which the next year was generally satisfactory, although the crop was lessened by the early and severe drouth of that season.

A much greater amount was sown that fall, 1854, The yield was good. In the autumn of 1855 a still greater amount was sown. This was the best crop raised here; many pieces yielded twenty bushels to the bushel of seed sown. This fall a much larger breadth of land was sown. It has never looked so well in the fall as this year. What was raised in this town last season will save us thousands of dollars that otherwise would have gone for western flour. The four successive crops that have been raised here, upon an average have proved as sure—yes, more so, than either corn, potatoes, or spring wheat. Yet what has been grown here, has been rather experimental, because our farmers had no knowledge of growing winter wheat six years ago. Then they would as soon have thought of attempting to grow the lemon or orange, as winter wheat; for we have scores of farmers here that never saw a field of it previous to 1853. The advantage of raising winter wheat here, over that of spring sown, are, that it can be put in when the ground is in better condition, than it is in the spring generally. From its earliness in ripening it has escaped the ravages of the weevil or midge; it puts the straw beyond the reach of rust, that is frequently so injurious to the later ripening spring wheat—besides it has matured before being much injured by drought, and it makes a much whiter, higher priced flour, and better bread.

The last spring was wet, consequently farmers were late in sowing their spring wheat. Just as it was heading out a severe drought and warm weather came on; this checked the growth of the straw, shortened the head and pinched the grain, so that taking our whole crop together it did not produce four bushels for the bushel of seed sown. The highest amount that I have heard of was eight bushels to the bushel of seed—the lowest one a half bushel. But as before said, the entire yield will not average four bushels per bushel of seed, and much of this light crop was sprouted in the field, during a long spell of rainy weather, while all the winter wheat had been previously harvested in good weather and condition.

Winter wheat has been grown here successfully, on interval and other low lands, where the raising of spring wheat, from its liability to the midge or rust, has been abandoned for years.

If the farmers, professional men, merchants, mechanics and others, *here*, can so successfully grow winter wheat with certainty and profit, we can see no good reason why the thing cannot be done in all other sections of New-Hampshire and New-England.

We presume there will occasionally be seasons in which the crop may be very light; so it is with corn, potatoes, and spring wheat—that was emphatically the case here the past season, with the two last named crops, but our farmers "will try, try again," next year.

We hear of some few nearly entire failures of winter wheat here, within the past four years, but we think the wheat was to be *commended* for not doing any better under the treatment it received.

The White Flint wheat has been the kind mostly grown here, but one or two bearded varieties have been raised with about the same success as that of the bald or awnless. L. BARTLETT. *Warner, N. H., Dec.*

Notes from Onondaga County.

THE CONCORD GRAPE.—Two or three years ago I planted a "Concord" grape. It yielded me about a dozen clusters of fruit the past season. I am much pleased with it. The berries began to color the last day of August, and by the 20th of September were dead ripe. In appearance it resembles the Isabella, except that the berries are round in shape, and not quite as large. Maturing during the warm season, the "Concord" is a higher flavored grape than the Isabella. I think it a superior variety, and destined to supplant our old favorite.

WINE FROM CATAWBA GRAPES.—Dr. B. F. GREEN, of this city, from a few Catawba canes, made thirty or forty gallons of wine, of a very fine quality last fall. The only ingredient added to the "pure juice," was a small quantity of sugar. It affords a very palatable beverage now, and will, of course, improve for a year or two.

HORSE-RACING AT AG. FAIRS.—I am glad to see the agricultural press coming "down" upon the pernicious practice of introducing horse-races at the county fairs. The legitimate show and fair must decline, if the race-course is to become a permanent institution. I go in for a divorce—peaceably, and by force of public sentiment, if it can be—forcibly, and by legislative interposition, if necessary. If trotting and racing are to come into fashion again, let them be placed upon an independent footing. It is no argument to urge that they *pay*, and that county societies are flourishing pecuniarily in consequence. You might as well undertake to support the church by licensing the vices of the metropolis. Nor is it a tenable argument that woman, "lovely woman," lends herself as a figure in these equestrian diversions. *No well-bred lady does so.* Let *that* be understood, and the evil can be soon abated.

VEGETABLES SHIPPED WEST.—Large quantities of potatoes were shipped from this county in November, and cabbages (in the form of *saur kraut*) and onions were *exported* to Cincinnati, the severe drouth in the Western States having cut short the supply of garden vegetables. Onions, purchased here for fifty cents a bushel, brought five dollars per barrel on the Ohio.

WESTERN INVESTMENTS.—One of our bank cashiers says that a million of dollars has been invested by Onondaga people in western land speculations, during the past year. How long can we stand this drain?

GOOD CROP OF BARLEY.—A drain-dealer told me the other day, that he had paid a Camillus farmer $610 for the produce of ten acres of barley ground; thirty or forty bushels was also reserved for seed. "Is farming profitable?"

CARROTS.—Upon 100 rods of reclaimed swamp, I raised this year over 400 bushels of carrots—being at the rate of 740 bushels per acre. The labor of cultivation was not one half of what it is on upland. In size they were the finest lot I ever had, the largest weighing four and four and a half pounds. Onions on the same tract, weighed one pound. I feed my family beef with carrots, and keep my horses in admirable condition on them, without grain. S. *Syracuse.*

Capt. Beaufort saw near Smyrna, in 1841, a cloud of locusts 46 miles long, and 300 yards deep, containing, as he calculated, one hundred and sixty-nine billions.

Profits of Poultry Keeping.

MESSRS. EDITORS—Having frequently noticed articles in THE CULTIVATOR, showing the results of different kinds of experiments made with barn-yard fowls, for the purpose of ascertaining whether they are profitable or not, and also for testing the comparative merits of different breeds of fowls for laying and for the table, &c., I send you a statement of an account kept by myself during the past year, thinking perhaps it might interest some of your poultry-loving readers.

The account was kept for one year, beginning Dec. 1st, 1855, and ending Dec. 1st, 1856. The stock of fowls consisted of fifteen hens and one cock, of the Chittagong breed. They were provided with a comfortable house, furnished with accommodations for laying, hatching, &c., and were allowed free access to the farm yards at all times. They were fed corn and oats, and also allowed a liberal supply of sour milk, no other animal food being given.

March 15th and 21st, 1856, nine of the hens were set on 117 eggs, but owing to the cold weather and other unfortunate circumstances, only 58 chickens were hatched, out of which 52 were raised.

When six months old, 18 pullets and two roosters were selected for another year, and the remaining 32 (being roosters) were weighed (alive) and taken from the yard and disposed of, and at the end of the year the 20 chickens, selected, were weighed.

A separate account was kept of the feed consumed and of the eggs produced by the old fowls, to enable me to judge of the comparative profits of producing eggs and raising chickens.

The amount of grain consumed and the number of eggs produced by the old fowls, and the market price of eggs during each month, was as follows:—

	Corn fed.	Oats fed	Eggs laid.	Price pr dozen.	Value
In Dec. 1855,....	. ...	3½ bu.	235	24 cts.	$4.70
January, 1856,	1 bu.	2 "	161	24 "	3.22
Feb'ry, "	1 "	2 "	274	23 "	5.25
March, "	1½ "	1½ "	237	18 "	3.55
April, "	½ "	½ "	123	14 "	1 43
May, "	1½ "	.....	205	12½ "	2.13
June, "	1½ "	.....	217	15 "	2.71
July, "	1½ "	.....	175	16 "	2.33
August, "	1½ "	.....	156	18 "	2.34
Sept'ber, "	2 "	.... .	178	18¾ "	2.78
October, "	2 "	.....	199	22 "	3.64
Nov'ber, "	2 "	.....	97	24 "	1.94
Total,.....	16 bu.	9½ bu.	2,247	.....	$36.02

Some of the pullets commenced laying before six months old, and the whole number of eggs laid by the 18 pullets, from that time to Dec. 1st, 1856, was 316.

Reckoning the grain, eggs, and chickens, at fair market prices, the account stands thus:

Poultry account,	*Dr.*
To 16 bu. corn, fed old fowls, at 68¾c. pr. bu.,.....	$11.00
9½ bu. oats, fed old fowls, at 43¾c. pr. bu.,.....	4 15
2 hens lost, at 75c. each, ...	1.50
	$16.65
117 eggs, set at 18c. per dozen.	1.75
29 bu. corn fed chickens, at 68¾c. pr. bu.,.....	19.94
2 bu. oats fed chickens, at 43¾c. pr. bu., ...	88
2 bu. wheat screenings, at 75c. pr. bu.,.....	1.50
Total expense.....	$40.72
Poultry account,	*Cr.*
By 2.247 eggs, laid by old hens, amounting to, ...	$36.02
32 roosters, (6 months old) weighing 258 pounds, (at 10 cts.,)	25.80
18 pullets and 2 roosters (8 months old) weighing 141 pounds, (at 10 cts.,)	14.10
316 eggs, laid by 18 pullets, at 23 cts. per dozen,.	6.05
Amounts to, ...	$81.97
Deduct expenses for feed, &c., of,.....	40.72
Leaves a profit of,.....	$41.25

The amount of manure produced is estimated to be fully equal in value to the milk and other feed not reckoned in the account, thus giving a clear profit of $41.25 on sixteen fowls for one year. W. E. HAXTUN. *Dutchess Co., N. Y.*

Books and Pamphlets.

TRANSACTIONS OF THE N. Y. STATE AG. SOCIETY, with an Abstract of the Proceedings of the County Agricultural Societies. Vol. XV.—1855. Albany: Chas. Van Benthuysen.

We have not yet had time to devote the attention to this volume, which we hope hereafter to give it. It perhaps includes more valuable matter than usual;—we may instance the article containing a further installment of Dr. FITCH'S careful and thorough researches into the entomology of the State; the essay of SANFORD HOWARD on Grasses and Herbage Plants, and the second part of W. C. WATSON'S Practical Husbandry, in which all the breeds of domestic animals on the farm are treated with considerable minuteness. The lecture by Prof. S. W. JOHNSON at the last Winter Meeting, on the Relations between Science and Agriculture, is marked by deep thought and correct views,—neither of them marred by chimerical hopes, or empirical pretensions. Judge CHEEVER'S Address, delivered on the same occasion, was referred to by us at the time, as a solid, instructive and remarkably valuable one; the subjects of the relations of the Farmer to other classes, and of emigration hence to Western States, are treated in it in a masterly manner. Dr. F. B. HOUGH contributes an Essay of the Climate of the State, which will, we trust, attract increased attention to this important subject.

NOXIOUS, BENEFICIAL AND OTHER INSECTS of the State of New-York. By ASA FITCH, M. D. pp. 336.

This is a copy of Dr. Fitch's First and Second Reports extracted from the Transactions, and bound together in a separate volume. Those who have read Dr. F.'s concise and able contributions in our paper, will not need to be reminded of his merits as an entomologist. There is a vast fund of information contained in the book before us, much of it derived from original researches, and all instructive and reliable.

THE AMERICAN POULTERER'S COMPANION. A Practical Treatise on the Breeding, Rearing and General Management of Various Species of Domestic Poultry. A New Edition, Enlarged and Improved. By C. N. BEMENT. With 120 Illustrations on Wood and Stone. New-York: Harper & Brothers.

In a neat volume of three hundred small quarto pages, closely but very legibly printed, Mr. BEMENT has issued the long promised new edition of his old and well known work on Poultry. It includes an introduction on the general economy of the poultry establishment; a chapter on poultry houses, including a considerable variety of plans and designs, and another on its accessories—nests, coops, feeding apparatus, &c., with similar illustrations. Then follow chapters devoted to the history and description, respectively, of Wild, Asiatic, Crested and the various sorts of other Farm-yard Fowls—the incubation of chickens, their fattening, preparation for market, diseases, &c. Concluding with a hundred pages on Turkeys, Pea, Guinea and Aquatic Fowls, with a brief notice of such wild birds as are susceptible of domestication.

The volume thus covers the whole subject, and will be found well worthy of consultation by the farmer or amateur. Many of the illustrations scattered profusely through it, are very handsome.

A PROFITABLE INVENTION.—Mr. ROBERT GRIFFITH, of Philadelphia, who two years ago patented a Horse-Shoe Machine, has lately sold the right for *sixty-five thousand dollars.* A joint-stock company has purchased the patent.

Practical Remarks on Manures.—I.

Excrements from Horses.

"Till well and manure well, is the whole secret of Agriculture."

TULL's theory of tillage, which was to supersede entirely the use of manures, by frequent and unceasing plowings and hoeings, although an entirely repudiated doctrine, still possesses its advantages when used in connection with frequent supplies of manure, and the above quotation from Oliver de Serris, places the whole matter on its proper footing.

HORSE MANURE ferments and decomposes very rapidly, and if it is not immediately applied to the land, it soon becomes comparatively useless; to prevent which it should be in some way composted; or on a farm where hogs are kept, it is a good and saving practice to have all the dung and litter from the horse stables thrown into a cellar or some other convenient place, where they will have access, and thus incorporate it with their manure, which is of a cool soapy character. They understand their part of the work, and will attend to turning the manure as often as necessary.

Where this method cannot be used, a spot should be taken from which the land rises in all directions. If no such place should be found in a convenient locality, one can easily be prepared by a little digging, at the lowest point of which should be inserted a tub or cask, designed to catch all the liquid portions of the manure. This can be covered with a wooden lattice or iron grating, and a pump put in; around which the manure should be piled. The pumps should be used as often as possible, and the liquid poured over the driest portions of the heap. In this manner both solid and liquid manures are preserved, without as much turning as is necessary under ordinary methods. But a better way still is to incorporate it with muck or pond mud, (when they can be procured,) in equal layers with the manure, as in making a compost heap, these not only preserve it by absorption, but are in themselves valuable fertilizers. Substitutes can be found in the use of forest leaves and sods from the road sides. A heap of this kind can hardly be turned too often, and in a dry season the application of water or liquid manure, will prevent fermentation and produce a more thorough decomposition.

Where it is impossible to procure either of the above ingredients to compost with horse dung, it will be found profitable on a stiff clay farm, to use sand, and clay can be used on a light soil; either of these would pay under such circumstances, as they would improve the mechanical texture of the soil.

The value of horse manure as compared with that of other farm stock, has been a matter of much discussion among scientific men for a long time, the view generally adopted being that it was inferior to most other animal excrements. It would perhaps seem that this question could be easily settled by analysis, but great difficulty arises in finding out anything definite by this mode, as the feed of horses varies so much in different circumstances; but for this, analysis would prove conclusively, and bring this and many similar discussions to an end.

We are of the opinion that when horses are fed mostly grain, their manure is superior to most others, especially when used in its fresh state, before the escape of nitrogen, which is the most important element of animal manures—not that it is any more necessary to vegetation than carbon, oxygen, and hydrogen, but it is less easily procured by the plant, as there is little of it in most soils, and they can get none from the air; hence the great value of all manures containing it; and as it is very liable to escape, too much care can not be taken to prevent such a loss. Questions of this kind require thorough practical experiments, performed for a series of years with great accuracy, on various kinds of crops, but are seldom attempted by our farmers as they require too much time and labor, which proves the great want of a good Agricultural School and Experimental Farm, sustained in a liberal manner, and managed by practical as well as scientific men. GEO. T. HAMMOND. *Farmingdale, N. Y.*

Saw-dust as Litter for Stables.

Some weeks ago an article appeared in the columns of this paper, in which saw-dust was mentioned and recommended as a litter for stables, which possessed a superiority over straw in several particulars. We have just noticed a communication in the *Farmer & Visitor*, (Manchester, N. H.,) in which the writer mentions several other advantages in addition to those which were named in the article referred to in our columns. Among the points in which saw-dust was found superior to straw by the person who had tried it in N. H., the first mentioned is, that it occupied less room in the barn, which is not unfrequently, as in the case in this paper, a matter of some importance. Next, saw-dust is claimed as superior to straw, because it absorbs more of the fertilizing matters about the stable, the person using it being very sure that the ammonial emanations were less strong on opening the doors in the morning than when straw litter was used. Next, it is said to be much less of a chore to clean the stable, and also, that so little comparatively had to be thrown out that one load lasted a long time. The next thing named as an advantage of saw-dust as litter is, that the manure heap occupied so much less space than when straw was used, and thus admitted more easily of being protected by a cevering from the wasting effects of exposure to sun, wind, and rains. Then again it is an obvious advantage to have in one's yard manure in as small bulk as possible, and this is effected to a great extent by the use of saw-dust. The same amount of fertilizing matter is, probably, contained in one load of manure made from saw-dust, as there would be in two or three loads of that which had been made from straw litter. Then, too, in the field it would be free from all the trouble which long manure frequently gives.

With so many points of superiority, we think it probable that saw-dust will, hereafter, be more generally used, at least in the neighborhood of saw-mills. If found to be a convenience or an advantage to any of our readers, it will give us pleasure to know that we have so far succeeded in accomplishing the object of our constant desires, labors, and exertions, which is, *to render to our readers the greatest amount of valuable services possible.*

Cookies.

One pound and a quarter of sugar, three-quarters of a pound of butter, one half a pint of warm water, four tablespoonfuls of caraway seed, one teaspoonful of soda dissolved in three of warm water, three pounds of flour. Roll out very thin, and bake in a very quick oven. A. A.

Gingerbread.

Two cups of molasses, one cup of melted butter, one egg, one cup of sweet milk, one teaspoonful of soda, one heaping teaspoonful of cream tartar, two tablespoonfuls of ginger, and flour enough to make a stiff batter. This should be baked with care as it burns easily, and if burned has a bitter taste. A. A.

Mock Sponge Cake.

One quarter of a pound of butter, one of sugar, three eggs, one half a pint of milk, one even teaspooful of soda, three coffee cups of flour, one heaping teaspoonful of cream tartar, a little salt, and essence of lemon. This will make two loaves. Bake in a quick but not too hot oven. A. A.

Sale of Benjamin Warfield's Short-Horns.

The sale of the herd of Short-Horn cattle, belonging to the late BENJ. WARFIELD, Sen., were sold at auction at his late residence near Lexington, on the 28th ult. The following account of the sale has been furnished us by WM. WARFIELD, Esq.:

COWS.

1. Cherry 2d, to J. M. Stone, Scott Co., $400.
2. Adriene, to B. Warfield, Fayette Co., $376.
3. Clara, to E. N. Warfield, Cooper Co., Mo., $150.
4. Sarah, to J. M. Stone, Scott Co., $200.
5. Duchess, to J. M. Stone, Scott Co., $400.
6. Miss McCaw, to J. Curd, Fayette Co., $310.
7. Bracelet, to G. Smith, Fayette Co., $175.
8. Ruth, to J. Wasson, Fayette Co., $195.
9. Caroline, to P. H. Thompson, Fayette Co., $100.
10. Mary Clay, 4th, to Wm. Warfield, Fayette Co., $100.
11. Kitty Morgan, to E. N. Warfield, Cooper Co., Mo., $80.
12. Eve, to L. Prewitt, Fayette county, $175.
13. Tulip, to S. T. Hays, Fayette county, $155.
14. Lady Fairy, (imported in 1853, by the Northern Kentucky Importing Company, and sold at their sale at $1,100.) to Dr. R. J. Breckinbridge, Fayette county, $455.

Fourteen Cows brought $3,265—average price $233.21.

HEIFERS.

1. Maria Hunt, to B. Warfield, $305.
2. Miss Chilton, to J. M. Stone, $230.
3. Mary Dewees, to B. Warfield, Fayette county, $310.
4. Charity, to B. Warfield, Fayette county, $205.
5. White Beauty, to Wm. Warfield, Fayette county, $70.
6. Alma, to Wm. Warfield, Fayette county, $150.
7. Melissa 5th, to S. J. Salyers, Fayette Co., $380.
8. Cherry 9th, to Cicero Coleman, Missouri, $425.
9. Red Rose, sold with her mother, (Duchess, No. 5.)
10. Adriene 2d, sold with her mother, (Adriene, No. 2.)
11. Juliette, to John Giltner, Bourbon county, $175.
12. Lady Fairy, 2d, to Wm. Warfield, Fayette Co., $605.

Ten Heifers brought $2,855.50—average price $285.55.

BULLS.

1. Young Chilton, (imported in 1853 by the Northern Kentucky Importing Company, and sold at their sale for $3,005,) to Dr. R. J. Breckinbridge, Rev. R. T. Dillard, Wm. and B. Warfield, at $650.
2. Exile, got in England by Mr. Fawkes' Bridegroom; to Dr. R. J. Breckinbridge and Wm. Warfield, Fayette county, at $300.

BULL CALVES.

1. Fayette, to G. Hill, Henry county, $80.
2. Boston, to S H. Shouse, $64.
3. Fancy Boy, to G. Smith, $95.
4. Herald, to J. Curd, Fayette county, $180.
5. Dudley, to R. Ducke, $150.

7 Bulls and Bull calves brought $1,519—ave'ge price $217.

Whole number, 31 thoroughbreds—average $246.40

Whole amount of sale, Cattle, Horses, Sheep and Hogs, $9,383.

Trial of Seeds from the Patent-Office.

JAPAN PEA.—In answer to an inquiry in the Co. Gent., a few weeks since, respecting this far-famed pea, I am induced to give my experince with it. Last spring I received from the Patent Office a package of the seed. I had heard and read so much in its favor, that I was desirous of raising all I possibly could from what little seed I possessed. Therefore I selected a warm rich portion of my garden—made it still richer by manuring with well rotted barn-yard manure. I planted them the 1st of May. They came up in about ten days and grew finely. They made showy, beautiful plants; in fact, I had nothing in my garden that attracted more attention. But the plants were all I got for my trouble. The peas were not "forthcoming." At the time of our first heavy frost (Oct. 15,) they were about half grown. The frost did not kill them at once; but they did not grow any after it. The experience of others in this section agrees with mine, as to their adaptation to the climate of Northern New-York. A few of the plants were exhibited at our County Fair, that were as GREEN as mine. In fact, I doubt if they can be ripened (unless under glass) as far north as this.

MEXICAN CORN.—I received a package of "New Mexican White Flint Corn" from the Patent Office last spring. I planted it the 10th of May in soil and situation that is well adapted to the growth of corn in general. Our first heavy frost held off about three weeks later than usual; yet the season was not long enough to ripen it. The growth of the stalk and ear was enormous; nearly equalling the statement of W. W. Randolph, in Co. Gent. of Nov. 20th, but unlike his it did not mature.

KING PHILIP CORN.—Some improved "King Philip corn," planted at the same time, was ripe enough to harvest the 1st of Sept. The latter variety, I think, will prove a valuable acquisition to the Northern States.

TURNIPS.—Some "Early Dutch Turnips," also from the P. O., prove to be the earliest of any variety I ever cultivated. I had no trouble in keeping the "Sweet German Turnip" perfectly sound and fresh until these were fit for the table. With these two varieties I can easily have turnips for table use at all times of the year. EDWARD L. COY. *West Hebron, N. Y.*

SEEDS FROM THE PATENT OFFICE.—The Patent Office has sent North, to us, I think, a valuable sugar plant in the *North of China sugar cane*. We can mature the plant for the syrup or sugar. All the obstacle lies in the seed, which we cannot mature so far north. Otherwise we would not suffer, I believe, in sugar-making with this cane in competition with the south.

My "*New Mexican White Flint Corn*," matured, and is a pretty good yield, and very large growth, many stalks of three ears measuring 13 feet or over, and nine feet to the first ear, as the officers of the Oswego Co. Fair saw waving over the speakers' stand on the second day of the fair.

The "*Forty Days Maize*" is not as early with me as the "New Mexican White Flint," and has a great objection in the enormous size of its cob. The kernel is very handsome, but it was about ninety days before it showed tassel and silk, which lateness with too large cob for amount of corn to the ear, satisfies me that this kind will do us *no good*.

"*California, or branch-headed Wheat*," in my view, would not be worth threshing here, if we wasted time and land to raise it. W. W. RANDOLPH. *Pulaski, N. Y.*

NORTHERN MUSCADINE GRAPE.—Mr. P. Stewart of the Shaker community at New Lebanon, invites our attention to the Report of the Fruit Committee of the Worcester Ag. Society, published in the Ag. Report of Massachusetts for 1855, which says:

"When asked which was the preferable grape upon the tables, to be eaten *now*, it was the unanimous opinion that the Early Northern Muscadine stood first, and the Early Amber next. Both these grapes were ripe, and the first quite so, while the Isabella was quite immature. In this vicinity the Isabella does not attain maturity oftener than once in three or four years, which fact is sufficient to effectually prevent its cultivation as a matter of profit. The others, although the berries are more foxy than the Isabella, especially in their perfume, are good growers, perfectly hardy, and the fruit is sure to ripen."

We should probably have agreed with the committee had we been present, notwithstanding Mr. Stewart fears we are prejudiced against his favorite grape, as we should have given the preference to a ripe Northern Muscadine over an unripe Isabella. If we lived in a climate where no better grape would ripen, we would cultivate the Northern Muscadine, but not otherwise.

CALIFORNIA PRODUCTS.—Among the products exhibited at the late State Fair in California, were Turnips, measuring 3 ft. in circumference—a Sugar Beet, weighing 103 lbs.—a Beet, weight not known, 3 ft. 4 in. long, and 20 inches in circumference 2½ feet from the top, and Cabbages weighing 50 lbs.

Notes for the Month.

JUDICIOUS BREEDING FOR EVERY FARMER. — We refer to some very excellent remarks on the subject of the advantages of breeding from pure-bred animals in another column. They are from the pen of R. A. ALEXANDER, Esq., of Kentucky, well known as himself a careful and successful breeder. The system recommended is one which, as he says,

"has been followed for a series of years with the utmost advantage by the most intelligent stock raisers throughout Great Britain. These men, never themselves owning a thorough-bred female, or an animal known to be such, attend the sales or lettings of those who make a business of breeding thorough bred stock, and there annually, or as often as they require one for crossing, either purchase or hire a bull or ram, and having used him for a year or two, or as long as he will answer their purpose, dispose of him to seek another."

The remarks made, though having reference chiefly to cattle, apply equally well to stock of all other kinds. They present the view of the subject which every enterprising and successful farmer should take, by which he might save much and make much, and which it has been the object of our paper to inculcate for many years. We have been surprised to learn the apathy that still is far too generally prevalent upon it. Farmers in this county of ours, as we know, though we are really ashamed to tell it, can only with the utmost difficulty be persuaded to go a little farther and pay a dollar or two more for the services of such Short-Horns as Dr. WENDELL'S, Ayrshires like Mr. PRENTICE'S, Herefords like Mr. CORNING'S, or Devons like Capt. HILTON'S, in preference to cattle of no more blood or breeding than their own. We hope they will be led to make some improvement in this particular. The subject is one susceptible of still further argument on the side of reason and enterprise, and we invite communications to aid in setting it in a proper light before farmers at large.

THE CHUFA OR EARTH ALMOND.—Our readers are referred to an interesting communication in another column, containing the experiment of a correspondent with tubers of this plant sent out from the Patent Office. His statements as to their large yield, and the purposes to which he thinks they may be applied, certainly *look well*, and are worthy of note by readers generally. The tubers sent us are from half an-inch to an inch in their largest diameter, shrivelled into all sorts of shapes, and about as hard as a chestnut, which they somewhat resemble in taste, having also a little of the flavor and sweetness peculiar to the almond.

DEATH OF ROSWELL L. COLT.—Mr. Colt died at his residence in Paterson, N. J., on the 23d of Nov., at the age of 77 years. Mr. C. became well-known many years since, by his extensive importations of improved domestic animals, and the warm interest he took in all efforts to promote the improvement of the agricultural interests of the country. The Newark Daily Advertiser says:—"Paterson will feel the loss of this noble-hearted man; his benefactions were liberal and extensive. There is scarce a church of any denomination in that place which stands not on ground presented by him. He was a Presbyterian, strong and decided in his preferences, yet he was liberal to other denominations. His extensive liberality to the Presbyterian church of Paterson, in all its relations, is well known and appreciated. Mr. Colt dispensed, through a long life, a liberal hospitality. With all his wealth, and surrounded as he was with magnificence, he yet retained in his dress and manners much of that simple taste in which he was educated."

The Albany Evening Journal, in noticing Mr. Colt's death, says:—"Mr. C. was among the most enterprising merchants and manufacturers that our country has produced. His elegant mansions, either in Baltimore, New-York, or Paterson, were ever the seat of magnificent and refined hospitalities. We have met, and enjoyed the high intellectual conversation, at his bounteous table, of John Quincy Adams, Daniel Webster, Henry Clay, James Kent, Philip Hone, and other distinguished men whose names belong to history. We have also sat at his table when the Patriarch was surrounded by his wife and fourteen sons and daughters."

A MARK OF PROGRESS.—*Porter's Spirit of the Times*, a journal devoted, as our readers are aware, "to Field Sports, the Turf, and the Stage," has frequently congratulated the country on the happy fashion just now so prevalent, of ladies' riding at our County, and some even of our State Agricultural Shows. It last week furnishes a striking example of the progress thus effected toward achieving what it considers the aim and tendency of this Female Equestrianship, viz.: to "*help make racing a national sport.*" Agreeing entirely, as we do, in this view of the probable result of such exhibitions, we cannot neglect to chronicle all the steps taken toward its accomplishment. The one in question is as follows: A challenge for a match of horses recently appeared in the paper above quoted, from a *lady*, who has found several equally "spunky" dames and damsels to accept it—about one of the latter of whom we now receive the information below:—

"Three times has she been a victor at the trotting courses of the Agricultural Fairs; on one of which occasions she (at Canandaigua) drove a black Morgan Stallion, in harness, in the slashing time of 2.38. This lady desires us to say to Di Vernon, that she is indifferent whether the trial be in running, steeple chasing, or in trotting; and if in running, is willing to go in either one or four mile heats."

According to present probabilities, the Union Course, which has already been the scene of so many similarly refined and ennobling contests, will shortly "behold two beautiful and high-spirited women, mounted on blooded running horses, flying through a four mile heat!" With *Porter's Spirit*, "we confess to no little interest in this business." *Are* our mothers, wives and sisters to be engaged in thus drawing the country "a few inches nearer the millennium" of the turf and its accompaniments?

PATENT OFFICE REPORT FOR 1855.—The Agricultural Report of the Commissioner of the Patent Office for 1855, has but just been completed by the printer, and we are indebted to the Commissioner, the Hon. CHARLES MASON, for an early copy. It forms a well-arranged and well-printed volume of about 400 pages. Its general arrangement is the same as that of the previous year, which was a great improvement on most of the former vols. We have barely glanced at its pages, but infer that this Report will be found at least equal to any preceding one. We shall endeavor to give some extracts from it next week.

THE DIOSCOREA.—We have been favored with a couple of good sized roots of the famous Dioscorea batatas, by Mr. JOHN DINGWALL, florist, of this city. One of them we had baked the other boiled. The baked one was decidedly the best, opening as white as pure flour, and though not dry and mealy as a fine potato, was very fair in this respect, and though to our taste not equal to a good potatoe, we doubt not it will prove, when one becomes accustomed to it, a very acceptable edible. Mr. Dingwall thinks that if it will stand the winter in the ground, it will increase in size another year, and becoming more mature, will be found far superior for the table to its present condition.

PRICES OF SOUTH DOWNS IN ENGLAND.—Mr. Henry Lugar of Bury St. Edmonds, one of the best breeders of South Downs in England, had a public sale on the 5th of Sept. last, at which 950 head were sold, producing £5,230—say $26,150—or an average of about $27-50 per head—172 yearling ewes averaged $27.25—29 yearling rams averaged about $120 each—23 older rams averaged $100 each.

HERD BOOKS.—Mr. ALLEN is now hard at work on the third vol. of his Short-Horn Herd Book, which, we hear, is likely to equal in the number of its entries, his second vol. Breeders who have not entered their animals, should lose no time in doing it. Address LEWIS F. ALLEN, Esq., Black Rock, N. Y.

SANFORD HOWARD, Esq., of the Boston Cultivator, is also at work on the third vol. of the Devon Herd Book, and all entries for it should be forwarded to Mr. HOWARD at Boston, without delay.

DEATH OF BLACK HAWK.—This celebrated horse, to whom the whole race of Morgan horses are greatly indebted for their notoriety, died at the stable of his owner, DAVID HILL, in Bridport, Vt., on the 1st of Dec., at the age of 23 years. Black Hawk was sired by Sherman Morgan, and he by the original Justin Morgan horse. He was foaled the property of Ezekiel Twombly in Durham, N. H., in 1833. By the death of Mr. T. he "passed into the hands of his nephew, by whom he was sold, when four years old, to A. R. Mathes, who sold him to Brown & Thurston, then of Haverhill, Mass. Mr. Thurston, (Benj. Thurston, now of Lowell) subsequently became his sole owner, and in 1844 sold him to Mr. Hill, by whom he has since been kept till the time of his death." The Spirit of the Times says:—

Black Hawk was a little less than 15 hands high, and weighed about 1000 pounds. His color was black, like that of his dam, and his colts have been black, bay, or chestnut, with hardly an exception. He possessed the character of the Morgan family of horses in an eminent degree. He was symmetrical, muscular, and compact in his form, and his elastic style of action, speed, and endurance, which qualities he imparted in a remarkable degree to his progeny, rendered him one of the most valuable stock horses ever owned in this country. Black Hawk could trot his single mile in 2:40, and exhibited considerable bottom in longer races. In 1842 he won a match for $1000, by trotting on the Cambridge Track five miles inside of sixteen minutes. Oct. 3, 1843, he won a race of two mile heats, beating two competitors easily in 5:43—5:48—5:47. Black Hawk was the sire of several of the fastest trotting horses on the turf, among which are Ethan Allen, the best trotting stallion in the world; of Lancet, who has beaten the best time of Lady Suffolk; of Black Ralph, Belle of Saratoga, Black Hawk Maid, &c. He was not only a fortune for his owner, but the value of his stock has added much to the wealth of the State where he was kept. Mr. Hill has received for his services over forty thousand dollars; his last season netted seven thousand dollars, and he was already booked in advance for five thousand dollars. His owner obtained insurance on his life until he arrived at an age when the premium charged was necessarily very high and he died uninsured.

SANFORD HOWARD, to whom the breeders of Black Hawk horses in Vermont should present some valuable testimonial for his early appreciation of their merits, and his constant efforts to make them known during his connection with THE CULTIVATOR, and since then through the *Boston Cultivator*, aptly suggests that the skin of Black Hawk be preserved by some skillful taxidermist, in such a manner as to represent with the greatest practicable accuracy, the body it originally covered. We may add the hope that our State Ag. Society will in this case, procure it for permanent exhibition in our New Museum, where it could but be a matter of great interest to every visitor. For ourselves we should look at it with peculiar pleasure, as it was through our columns as above stated, that this celebrated horse first became more generally famous, and through them that his true history was originally elicited and published.

PREVIOUS NUMBERS OF THE REGISTER.—We are constantly asked if these can still be furnished, and desire to answer that THEY CAN, in any desired quantities. Their contents are now as valuable as the day they were first published. Price, Twenty-five cents each. The issue for 1857 is Number Three.

A LARGE FLOCK.—It is said that Mr. McCunnell, of Sangamon county, Illinois, has the largest flock of sheep in the United States. It numbers twenty-one thousand, and all of the choicest Merinos.

ORIGIN OF THE AYRSHIRE CATTLE.—The Paris Exhibition of domestic animals, last summer, seems to have thrown some light on the long disputed question as to the origin of the Ayrshires. A breed of cattle from Denmark, exhibited on that occasion, so strongly resembled the Ayrshires, that many believed them to be descendants of that breed, as it was known that many Ayrshires had been exported to Denmark. In answer to an inquiry on this subject, the editor of the *North British Agriculturist*, in that paper of Oct. 29, says: "We had opportunities of knowing that a considerable importation of Ayrshire stock into Russia, Prussia and Denmark, had taken place for some years past. On seeing the cattle in the Paris Show referred to, we inferred that they were descendants of imported Ayrshires; but the Professor of Agriculture in Copenhagen, M. Jorgensen, and the Danish representative at Paris, Baron Delong, informed us that they were the indigenous breed of Holstein, and their additional representations satisfied us that this Holstein breed is the original Ayrshire. The early connection of this country with Denmark fully confirms the conjecture that the Sea Kings brought with them some of their valuable domestic animals, and of these the breed now known as Ayrshires."

ARRIVAL OF IMPORTED STOCK.—The ship Antarctic, from Liverpool, arrived at New-York on the 13th, laden with a larger number of fine domestic animals than were ever before brought to this country in one vessel. A notice of this cargo, from a British paper, will be found in the Country Gentleman of Nov. 6, p. 300. In addition to the animals there mentioned, including horses, cattle, sheep and swine for R. A. ALEXANDER, of Kentucky, and Mr. THORNE, of Dutchess country, the Antarctic brought a lot of select and rare birds for Mr. J. J. BOWERS, of Baltimore, Md. Among them are gold and silver pheasants, remarkable for their beautiful plumage. Also, white and black swans, white peacocks, magpies, with various kinds of chickens of the most delicate, rare and valuable species.

CATTLE SALES.—We hear that S. P. CHAPMAN, Esq., of Clockville, has recently sold a very superior bull calf, "Perfection"—out of Duchess by Halton, to J. W. CHADDOCK & BROTHER of Pavilion, Genesee Co. Both sire and dam have won first prizes at our State Fairs, and Perfection is said to be worthy of his parentage. Mr. C. has also sold a heifer, "Ruby 6th," to Mr. HEMAN HILL, of Brookfield, Madison Co. She was sired by Halton, and her grandam was Mr. C.'s famous milking cow Ruby.

INFORMATION NEEDED.—A correspondent writes us as follows: "Agricultural information is a great want of these farming times. Who raises the largest crops and the best cattle, and how it is done, is the question. Hundreds of farmers are at this moment halting between two opinions. They are revolving this query, "Will farming pay?" They are in doubt whether to go forward or stop. Solve this problem for them, favorably to Agriculture—give them facts and figures, places and dates, and my word for it Agriculture would receive an impetus never dreamed of. Societies and Legislatures must scatter Agricultural documents with a more lavish hand, if they would do all the good possible. Now is the time for starting *Farmers' Clubs*. We are taking the introductory steps, and I intend to note every new idea brought out at these meetings for the benefit of some Ag. paper."

PREMIUMS.—The list of prizes offered for subscriptions will be found on the last page. No one can spend a few hours in procuring them, without securing something for his trouble—our thanks and some benefit to his own neighborhood if nothing else!

☞ At the late State Fair in California, the first prize for the best entire horse, was awarded to a Black Hawk Horse called "David Hill," owned by A. J EASTON, Esq., of San Francisco.

CHINESE SUGAR CANE.—All reports from those who have grown this plant, so far as we have seen, have been highly favorable—so much so that all the seed which can be procured, will be planted the coming season, when its value as a syrup plant will be thoroughly tested. So strong is the confidence in it, that several gentlemen in the Southern States intend to plant from ten to fifty acres, and we hear of one who proposes to plant one hundred acres, from a belief that very excellent syrup may be made from it at a great profit, even should he fail to make it into sugar.

We are indebted to a correspondent at Baltimore, for some notes in relation to it, from which we learn that Mr. ASA WHITNEY, near Washington city, raised last summer one hundred bushels of the seed, which have been purchased by the Patent office at $5 per bushel, for gratuitous distribution. One bushel of it is to be sent to each of the Secretaries of the several State Ag. Societies for distribution.

TREE CUTTING MACHINE.—E. L. R. sends us from Baltimore a short description of a machine for cutting Trees, invented by Mr. C. G. Ehrsam. "An iron frame is made to clasp the tree, and from this frame a chisel shaped knife is brought in contact with the trunk. By the turning of a wrench, the chisel is worked round and round the tree, cutting its way to the center. The inventor claims for it an efficiency equal to the felling of a tree of four feet in diameter in half an hour." Unless we are much mistaken, we saw it on exhibition at the U. S. Ag. Society's Philadelphia Show, when we confess we were not very favorably impressed with its operation. It would not compare with the Steam Tree-Cutter mentioned by us on page 237 of the present vol., as shown at our last State Fair at Watertown.

LONG WOOL.—Seeing a piece in the Dec. Cultivator, induces me to send you a sample of my wool which I this day took from my Teeswater buck, who was one year old the fifteenth day of last April. Weight of buck the 23d day of last September, 218 pounds. He was sheared the 18th of last June, and his wool at that time was twelve inches long by actual measurement; adding the length of the inclosed sample of five months and eighteen days growth, will make eighteen inches in length, and as to quality, I would like your opinion as to how it compares with wool from other breeds of mutton sheep. JOHN BARDEN. *Wells, Vt.* [The sample inclosed was a very good one, and compared well with other long wool we have received.]

A "PATENT VINE PROTECTOR."—We were shown last week the model of a Grape House, for which a patent has recently been obtained by Mr. Abel H. Grennell, of Springfield, Vt. It is intended to supply the grower with the means of enclosing his trellises under glass, and at the same time of opening them on hinges out into the air, through doors provided for the purpose. The house formed when the doors are closed is octagon in shape, and can be made quite an ornament. At the same time we doubt whether a plain cold vinery, the plans for which have been fully laid down in our columns, will not prove cheaper and equally serviceable in all ordinary cases.

QUEENS CO. AG. SOCIETY.—The annual meeting was held at the court-house on the 2d Dec., when the following officers were elected:—

President—Hon. WM. T. MCCOUN, Oysterbay.

Vice Presidents—Samuel M. Titus, Oysterbay; Stephen L. Spader, Jamaica; Jeremiah Valentine, Flushing; Wm. L. Laing, Hempstead; James P. Smith, North Hempstead; Joseph Tompkins, Newtown.

Cor. Sec. and Treas.—John Harold, Hempstead.

Managers—Wm. J. Youngs, Oysterbay; Daniel R. Suydam, Jamaica; Thomas Whitson, Flushing; S. B. Mersereau, Hempstead; R. E. Thorne, North Hempstead; John W. Morrell, Newtown.

Rec. Secretary—Robert Willetts, Flushing,

The Treasurer reported a balance of $225.42 in the treasury. A piece of plate of the value of $100, was voted to Mr. HAROLD, for his efficient services as secretary and treasurer.

Inquiries and Answers.

STRAW AND MUCK FOR COMPOSTING.—Can a farmer who has large quantities of straw for litter, use to advantage muck, or anything of the kind, in composting? May not straw take the place of everything else here? P. *Salisbury, Ct.* [Under ordinary circumstances, straw is the most convenient and useful material for absorbing the liquid portions of manure, on account of convenient handling, absorbing powers, and utility for littering stables. The only difficulty is to procure it in sufficient quantity; and the most frequent want of proper management is in not applying it in just the right quantity at all times. Muck is eminently valuable, provided it has been *well dried;* applying it when saturated with water, it cannot, as a matter of course, absorb manure. Muck, turf, loam, &c., are generally most useful in using by alternate layers with manure, in making compost heaps at other times than winter.

WATER LIME.—Will you be good enough to inform me through the pages of the Country Gentleman, what water lime is, as I see it recommended as a cement for cellar floors. WM. M. JONES. *Digby, N. S.* [Water lime, which our correspondent may perhaps be familiar with under the name of *hydraulic cement*, is made by burning an impure limestone, and then grinding it like plaster or gypsum, for use. When mixed with nearly twice its bulk of clean sharp sand, and mixed with water, it soon "*sets*," and by exposure to air and water, becomes in a few months hard like stone. Two parts of water-lime and three of sand, usually make the hardest cement. A cellar, first smoothly paved with small stone, and then coated with water-lime mortar, made of the best materials, is furnished with as perfect a floor as by the best flagging.

Water-limestone differs from common limestone by the impurities it contains, and more especially by a large proportion of alumina or clay—it does not burn so as to slack to powder, and hence needs grinding. It has been made artificially by mixing clay and some other ingredients with common or pure lime.]

LIME AS MANURE.—Is lime good on land that is full of lime-stone? In this vicinity many farms are covered with blue lime-stone. Will lime be of use to such land? JOEL BROWN. *Mount Healthy, Ohio.* [It is a common opinion that where limestone is abundant, it will be only "carrying coal to Newcastle" to apply it as manure. We have, however, known it to prove decidedly beneficial on such soils—while in other instances it exerted no sensible influence on some soils where no limestone existed. We have not yet had a sufficient number of well-conducted experiments on soils of different character, to establish a rule for its application. We can only recommend *trial* to our correspondent, and careful measuring or weighing results.]

THE BARBERRY.—I have noticed a print that recommends the Barberry bush (Berberis vulgaris) as a hedge-fence plant. Please let your valuable paper tell us your opinion of it, and whether it is all humbug as some suppose, about its influence in blasting wheat. I have about a quart of the berries that I might plant as an experiment, but I should like your advice. THOS. LAWRENCE. *Olena, Ill.* [The barberry grows very compactly in a mass, without the cutting back required for most hedge plants. It is full of prickles. It would doubtless make a good garden hedge or screen—perhaps as stout as the privet or nearly so, but we should think not large enough to form an effectual barrier against cattle. The notion that it injured wheat was long since exploded. We have seen the heaviest crops of wheat, growing close beside it. It was once claimed that it breeds or fosters a parasitic fungus, that extended to, and destroyed wheat. But botanists found that no parasitic ever found on the barberry, at all resembled such as infest wheat—they were totally distinct, and to suppose that one would extend to and injure the

other, would be no more reasonable than to fear that young pigs could catch the whooping cough from children.]

LIME AND MARLS.—Can you inform me of any late work on the use of lime and marls as fertilizers? T. M. *Erie, Pa.* [We know of no late work on this subject. Ruffin's "Essay on Calcareous Manures," published at Peterburgh, Va., about fifteen years since, is a very valuable work. We do not know where it can be had, but most likely by addressing F. G. RUFFIN, Ed. Southern Planter, Richmond, Va. Price, about $2.]

MOTT'S FURNACES.—What is the price of the different sizes of Mott's Agricultural Furnace? S. M. B. [The prices, according to Emery Brothers' Catalogue, are as follows:—15 gallons, $9—22 gall. $12—30 gall. $15—60 gall. $23—90 gall. $35—120 gall. $50.]

POULTRY.—Please state what is the best Poultry Book and its price—also whether there is any Poultry Paper published in this country. C. H. [It is, perhaps, a difficult question to decide as to which of the numerous works on Poultry, is in all respects the best, but we can recommend the new edition of BEMENT'S "Poulterer's Companion," price $1.25, or $1.50 sent postpaid. There is no Poultry paper published in this country, nor indeed do we know of one any where. The Poultry Chronicle, published for a year or two in England, was discontinued some time since.]

PLANTING THORN SEED.—Presuming that Mr. RUDISILL, of Pulaski, Ohio, in inquiring how he can grow hedge-thorn from seed, means the common English or Irish hawthorn, we take pleasure in informing him that in Ireland, where this plant is propagated very extensively, the usual plan is to gather the "haws"—berries—when they are fully ripe (say in November,) and digging a round, deep hole, bury them in the earth some 20 or 24 inches below the surface. There they lie until the spring next succeeding the one after they are buried. They are then taken out, and being planted like peas, soon show themselves as "Quicks" in the nursery. A. B. *Albany, N. Y.*

CLEANING CARROT SEED.—"J. W." can clean his carrot seed by threshing with a common flail; winnow in mill, or an old-fashioned hand fan or willow fan. He will also need screens or "riddles" that are suitable. Large quantities are raised in this vicinity, and cleaned in this manner. A. S. Moss. *Fredonia, N. Y.*

CRANBERRY CULTURE.—I wish to make some inquiries about the cultivation of the cranberry. I have a low piece of ground, black muck from two to four feet deep, rather wet and boggy. Is this suitable land? When must they be set—where can they be obtained—is there any difference between wild and cultivated? Must they be set in drills? How long before they will bear? WM. MARKS. *Roseboom, N. Y.* [We shall be glad to hear from any of our readers in answer to the above inquiries.]

INQUIRY.—Can you or any of your subscribers, tell me what ails my horse? I have a horse that I value at $200, and I am teaming with him every day, and every morning when I start with him he appears to be perfectly well in every way; and every night, or rather every afternoon about four or five o'clock, he begins to be lame in one of his hind feet, and comes home at night quite lame. He has no appearance of any bunches or blemishes of any kind whatever, and his leg is not swollen or inflamed at all as I can discover. Now if any one can tell me what is the matter with him, and how I can cure him, they will confer a great favor. J. P.

FRUIT AND BEE BOOKS.—*L. W., Northfield, Ct.* We can safely recommend Thomas' "American Fruit Culturist," and Quinby's "Mysteries of Bee Keeping"—the price of each, $1.00, sent by mail postpaid.

BLIND OR WOLF TEETH IN HORSES.—I wish some of your subscribers would inform me through THE CULTIVATOR, whether young horses have what the farmers here call Wolf teeth. I was told a few days ago, that two of my promising colts had Wolf teeth, and that if they were not knocked out soon, they would soon go blind. Any information will much oblige JNO. M. E. VALK. *Meadow Bluff, Va.*

In no work on the diseases of horses, so far as we know, is what are called "blind teeth," noticed. The first notice we find of them, is in THE CULTIVATOR for 1843, where they are described by a southern writer as follows:

"There occurs in some horses, between the ages of three and six, between the bridle tooth and grinders, a *small, long tooth*, without roots, and not inserted in a socket, but merely in the gum of the upper jaw. It has never been alluded to in any system of farriery, but our planters can trace its existence in this State for more than half a century.

"It may and doubtless does occur in horses of any shaped head, but in the three cases on my own farm, it was in horses of *dished* heads. One had gone entirely blind before I was apprised of the cause, and the other two I relieved by immediately extracting the *blind teeth*. Hundreds of instances could be adduced of the existence of blind teeth, and the destruction of sight when not extracted. No horse has ever been seen with them at mature age, *having good eyes*.

"It is conjectured by some to be peculiar to Indian corn feeding; by others, to a hot climate. The three cases under my own observation were in horses raised on my own farm; and not having ever seen any allusion elsewhere, I am inclined to believe *it is confined to the South*."

The publication of the above, brought us several statements from different parts of the country, all the writers agreeing that the "blind teeth" were the cause of blindness, and that they should be extracted as soon as discovered.

SALE OF BROOD MARES.—The Bardstown (Ky.) Gazette says that Messrs. F. G. Murphy & Co. of that vicinity, have sold to R. A. Alexander, of Woodford, Ky., the following brood mares, at the prices annexed: Motto $1000, Sally Ann $1000, Bettie Lewis, $1000, Kate Quinn $500.

GAS LIME AS A FERTILIZER.—Can you enlighten me as to the value of Gas lime as a fertilizer? There is a strong prejudice in my neighborhood against its use, many believing it to have an injurious rather than a beneficial effect. J. H. [We should be glad to hear from some of the farmers of this county, who have used the refuse lime from the gas-works of this city, on this subject. In the mean time, we refer J. H. to the 7th Vol. of the Co. GENT., pp. 201, 304, 314, for valuable information in relation to the use of Gas lime. We add the following, which we find in the last No. of the North British Agriculturist:—

GAS LIME AS A MANURE.—Having for three years past used above 400 tons of Gas Lime, I have found decided benefit from it, applied to wheat or beans, at the rate of four to five tons per imperial acre, as it is obtained from the Gas Works; either harrowed or plowed in before sowing—but the most marked effect is obtained by using it as a compost, mixing five to eight tons with the same quantity of earth or road scrapings, weeds, etc., and four cwt. of salt; allowing it to lie for three or four months before using. In 1854 I applied the above-noted quantities to parts of two old pasture fields, and where applied, the cattle, horses, and sheep continue to eat quite bare, while the other parts are left rough to the last. For beans, I find that lime from the Soap Works, used as a compost in the same quantities as Gas Lime, increases both the yield of the straw and grain, far beyond any extra manure I have yet tried. My farm is 400 feet above level of the sea—strong loam with clay subsoil—thoroughly drained in 1853-4, and every five yards, with three feet drains laid with oval tiles. WEST RIDING, YORKSHIRE.

EMERY BROTHERS,

ORIGINAL AND SOLE PROPRIETORS OF THE

ALBANY AGRICULTURAL WORKS,

AND

WARE-HOUSE, SEED STORE AND SALES ROOM,

52 STATE-STREET, ALBANY, N. Y.

MANUFACTURERS AND WHOLESALE AND RETAIL DEALERS IN

Emery's Patent Railroad Horse Powers and Overshot Threshing Machines & Separators

Agricultural Machines and Implements of the Most Approved kinds Extant;

Dealers in Grain, Field, Grass, Garden, and Flower Seeds and Fertilizers.

WHOLESALE PRICES FOR 1857.

Emery's Patent Portable changeable 2 horse power,	$116		do	Drag Cross Cut Saw Mill, five feet Saw,...	40
do	One horse power,.....	85	do	Circular and Drag Saws combined,.....	80
do	Thresher and Separator, 14x26 in. Cylinder,	40	do	Slitting Table and 12 inch Saw for above,..	7
do	Thresher and Cleaner, 14x26 inch Cylinder,	125	do	Clover Mills and Cleaners,.....	$50 to 100
do	Complete sett 2 horse machines and bands,.	160	do	Cider Mill and Press,.....	$40 to 45
do	Complete sett 1 horse machines and bands,.	128	do	Corn and Seed Planter for horse or hand,	$6 to 14
do	Complete sett 2 horse machines for Threshing and Cleaning, ...	250	do	Churn. mach. for horse power, 1 or 2 churns,	12
do	Fan mill for hand or power five sizes,..	$21 to 32	do	Power Corn Shellers, two sizes, ...	$45 to 55
do	Circular Cross Cut Saw Mill, 24 inch Saw,.	37	do	Dog and Sheep Churn Powers,.....	15
			Bands and sett extras, wrenches, &c.,.....		5

Extracts from Letters of Persons using them.

"Messrs. EMERY BROTHERS—In answer to your inquiry "of whom and what kind of Horse Powers and Threshing "Machines I purchased, and which is claimed by the pro- "prietor of a competing firm in your city, in their adver- "ments as of their manufacture with my certificate "attached; I have to say that I purchased it from an ag- "ricultural dealer in Louisville, Ky. The castings have "the words 'Emery's Patent' on them. It was a good "machine, and I threshed eleven thousand bushels wheat, "and one thousand bushels oats and rye, and my toll "brought me one thousand dollars, after paying all expen- "ses, all in the season of 1855. SAMUEL JOHNSON, "Bonham, Texas, January 3d, 1856."

"Messrs. EMERY BROTHERS—I'm pleased with the ope- "ration of my Power and Thresher purchased from you "this season, and have gotten out twenty-seven bushels of "wheat per hour. I think I can beat the manufacturers "in getting out wheat. My horses are light, weighing but "1,500 lbs. at most. Enclosed please find drafts, &c., &c. "WM. T. HANNAFORD. Nansemond Co., Virginia. "July 7, 1856."

"Messrs. EMERY'S.—I purchased of an agricultural "dealer in Louisville, Ky., June, 1855, one of your patent "Horse Powers and Threshing Machines, being the third "I have purchased of the kind. We commenced thresh "July 5th, have been surrounded with several others of "different patterns. Have gone through the length and "breadth of their circuits and finished jobs after the most "noted machines, and came off victorious in every neigh- "borhood. The first machine I sold. With one of the "others my youngest son threshed nearly fifteen thousand "bushels wheat and rye, and my oldest son with the other "threshed ten thousand bushels, and then sold the ma- "chine. We could have sold the one we now have long "ago, if we had desired to do so. This was all in the har- "vest of 1855. C. C. TAYLOR. Pulaski Co., Kentucky, "Jan. 7th, 1856."

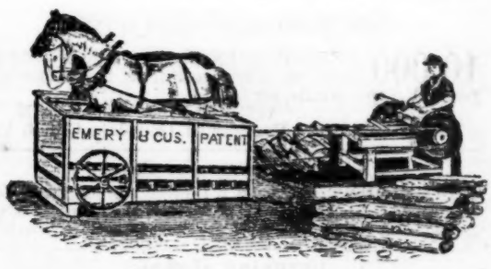
In addition to the above recommendations should be named the fact that the highest premiums were awarded the above machines over all others at the following State Fairs during the past season:

New-Jersey at Newark, Iowa at Muscatine,
Pennsylvania at Pittsburgh, Kentucky at Paris,
Michigan at Detroit, Tennessee at Nashville,
Ohio at Cleveland, Tennessee at Knoxville,
New-York, at Watertown.

and at a large number of County and other Fairs. They were also exhibited and received especial premiums and commendations at the following State Fairs—they being by regulations of the Societies excluded from competition —being out of the States.

Indiana at Indianapolis, Illinois at Alton,
Wisconsin at Milwaukie, Georgia at Atlanta,
Virginia at Richmond.

Albany, Jan. 1, 1857.



EMERY BROTHERS,

Proprietors of the Albany Ag. Works, Albany, N. Y,

Manufacturers and Dealers in Agricultural machinery—calculated for Horse, Steam or Water Power.

Among the leading articles are Emery's Patent Railroad Horse Powers and Threshing Machines—with separators, also with cleaners combined.

EMERY'S PATENT HORSE POWERS

are closely imitated and offered in various markets for sale, and not unfrequently as of the genuine manufacture, by a competing firm in this city, whose stock in trade, to a large extent, consists in maligning and misrepresenting persons and facts concerning the Proprietors and business of the

ALBANY AGRICULTURAL WORKS,

as well as *themselves* and *their* counterfeit and infringing wares, which not unfrequently has the intended effect to palm off a much inferior article as the genuine, and by holding out greater inducements to dealers in way of commissions, (which the profits of the genuine article cannot afford,) induce such agent thereby to purchase the inferior and infringing machine for sale to their unsuspecting customers, as well as many other articles in imitation and in violation of the Patent Rights of the Proprietors of these works, for which, suit for damages for said infringements has been commenced in the United States Courts, before whom the case will be tried on its merits as soon as it is possible or practicable, when the proprietors have no doubt of the issue in favor of the Patents, and justice rendered for past infringements.

Thus far, no trial having been had, or decisions on the merits of the case been given, certain publications to the contrary notwithstanding, which have been made for and paid by said competing firm, and styled Legal Notices, &c., &c., and published in newspapers, circulars, &c.

To distinguish EMERY'S PATENT IMPROVED HORSE POWERS from all others, it is only necessary to examine the following points, all of which are important and give to them their world wide reputation; ***none of which are found in other powers.*** All the castings have the words EMERY or EMERY'S PATENT in raised letters on them.

The small shafts of the endless chain have a double shoulder turned upon them, the outer one for keeping the small wheels apart and on the track and from wearing against the links of the chain. The several geers and pullies are all confined to their shafts by substantial couplings, with large screws and nuts upon the outside, similar to that upon a wagon axle.

The geers and pullies can be transposed, and thereby produce several degrees of force and motion required for different purposes; also for making it a right or left-handed power; all of which is done by the simple process of removing the nuts and changing the geers and pullies, (*while with others it is necessary to remove and reverse the shafts themelves, end for end, to change it from right to left, and without the means of varying their force and motion.*)

They are also constructed with a complete circuit of heavy cast-iron track, which is not the case with others.

Thus making a difference in the cost of construction at least 10 per cent. greater than the best of others. Their Threshers and Separators are still more expensive and perfect in their construction, the differences often producing results from 50 to 100 per cent. greater than the best of others of similar construction, even when both kinds are driven by the SAME HORSE POWER.

They are all made right and left handed, and may instantly be so changed. The pullies for the cylinder are provided with spring ratchets, and while they drive in one direction they move freely upon the shaft in the opposite, thus allowing the HORSE POWER to be stopped instantly and easily without straining the band or geering, the cylinder being free to run until it loses its momentum.

The Separator crank has a twenty-four-inch cast-iron face pulley over which the main band passes, giving to it the required motion, the said iron pulley serving as a balance wheel to the crank and producing a smooth and steady action or motion. The cylinders are all first balanced stationarily as with others, but are afterwards subjected and adjusted to a velocity double that required for threshing grain. This last is an important process, often doubling their utility, efficiency and durability. [The cylinder heads are solid cast-iron and fitted to heavy cast-steel shafts extending through and through.

The journal boxes are all made in two parts and lined with a composition of tin and antimony, the best known material for the purpose, thus admitting of being adjusted as they may become worn and loose.

The Thresher frames are constructed with a substantial bottom or sill timber extending nearly the length of the machine upon the floor or ground, thus giving them a greater base and firmness than when simply standing upon four legs with narrow base. The concaves are adjustable in every direction.

The cylinders for all their threshers, whether operated by one or two horses, are 26 X 14 inches, being one-fourth more capacity than those of any other maker for one-horse power, and the same as the largest for two horses.

The frames of the Threshers extend fully to the top, instead of the upper works being constructed by simple planks bolted together edgewise.

No exertions will be spared to meet the wishes of those dealing in and using the class of implements they manufacture. The public may rest assured the reputation heretofore earned for their machinery, &c., shall be fully sustained, by employing none but the best material and workmanship, and by strict attention to business, they hope to merit and enjoy a continuance of the patronage heretofore so liberally bestowed.

LOCAL AGENTS, in all the principal towns and cities in this and other countries, where none are already established, are solicited, to whom, if well accredited, most liberal terms will be afforded for making this business a safe and profitable investment. All correspondence promptly attended to. ☞ Full Descriptive Illustrated Price Catalogues sent gratis on application. EMERY BROTHERS. Albany, Jan. 1, 1857.—w1tm1t.

STUDY YOUR PROFESSION!

FARMERS who would improve their minds as well as their farms, and who would have their sons love Farming, should procure the following books:

Norton's Elements of Practical and Scientific Agriculture,	$ 60
Nash's Progressive Farmer,	60
Johnston's Elements of Ag. Chemistry and Geology,	1 00
Johnston's Agricultural Chemistry,	1 25

Sent free of Postage on receipt of price.

C. M. SAXTON & CO.,
Agricultural Book Publishers,
140 Fulton-st., New-York.

Book Agents, Farmer's Sons—everybody with a small cash capital can make money by selling our popular Agricultural Books. Discount liberal. Catalogues free.

Jan. 1—m1t

HAY PRESSES.

DEDERICK'S CELEBRATED PARALLEL LEVER Portable and Stationary HAY PRESSES, patented May 16th and June 6th, 1854—which (at about the same cost of transportation as a Railroad Horse Power and Thresher,) are now being forwarded to all parts of the country, and are in every case giving the most decided satisfaction; which (with two men and a horse) are warranted to bale from six to nine tons of hay per day, according to the No. or size of the press—and which are sold for from $100 to $175. For circulars, with full explanatory engravings, and numerous first class references, apply personally or by mail to WILLIAM DEERING & CO.,
Manufacturers, Albany, N. Y.

Dec. 11—weow&mtf

NURSERY STOCK.

10,000 ANGERS QUINCE, 10,000 Apple Seedlings, 5,000 Peach, one year from bud, 30,000 one-year-old Apple Grafts, for sale by
WILLIAMS & CHAPMAN,
Dec. 11—w3tm1t* Fayetteville, Onondaga Co., N. Y.

Short-Horns for Sale.

FAIRMOUNT, (490,) and 6 thorough-bred Short-Horn Bull Calves for sale by E. MARKS, of Camillus, Onondaga Co., N. Y. Dec. 11—w6tm1t*

Peruvian Guano,

GOVERNMENT Brand and Weight. For sale by
A. LONGETT,
Jan. 1—m2t 34 Cliff-st., (corner of Fulton,) New-York.

PARTNER WANTED, with $5,000, in the Agricultural Implements, Fertilizer, and Commission business, in the City of New-York, now doing a good, safe and profitable business, which can be largely extended. For particulars address, J. ALEXANDER, Box 3230, New-York Post Office. Dec. 18—w2tm1t.

Chinese Potato, Imperial White,

THE same as exhibited by us at the Crystal Palace Fair, ours being the only ones of American growth—$20 for 100, $5 for 20, $3 for 12. Imported tubers and root cuttings, of uncertain varieties, not guaranteed, $65 per 1000, $7 per 100, $4 for 50, $2 for 25, with full treatise on culture. Orders for $5 or under, cash—larger orders one-third cash and balance on delivery in the spring by Express. Chinese Sugar Cane seed—packages of fresh seed for one-half acre, $1, with directions. Earth Almond, $1 for 50. Licorice—$10 per 100, $3 per dozen. Osier scions—$2 to $5 per 1000. Lawton Blackberry—$25 per 100, $4 per dozen. Victoria and Linnæus Rhubarb—$9 per $100. Madder—$10 per 100. Giant Asparagus, $4 to $6 per 1000. King Philip Corn, Orange Water Melon, with a most extensive collection of Vegetable, Flower, Agricultural, Tree and Shrub seeds in the Union, *all warranted*.

N. B. Priced Catalogues of Trees, Plants and Seeds will be sent to applicants. WM. R. PRINCE & CO.,
Dec. 18—w3tm1t* Flushing, N. Y.

Columbian Guano,

IMPORTED by the Philadelphia Guano Co.
A. LONGETT, Agent.
Jan. 1—m2t 34 Cliff-st., (corner of Fulton,) New-York.

TAKE THE BEST.

A New-England Family and Political Journal.

THE LARGEST, MOST VARIED AND CHEAPEST PRINTED.

The Springfield Weekly Republican.

Published at Springfield, Mass., by Samuel Bowles & Company.

THIS popular Family and Political Journal unites the excellencies of the large city weeklies, which it is equal in size, with the local details and variety of New-England country newspapers, besides several important features peculiar to itself.

It is handsomely printed in a quarto form, with eight pages and 48 columns, nearly all given up to Intelligence of every kind, carefully prepared under appropriate heads, Editorials, Agricultural Review and Summary, the city and local Markets Miscellany, Poetry, Tales, &c., in great variety.

With the beginning of the new year it commences AN ORIGINAL NEW ENGLAND NOVEL, charmingly written by an accomplished lady author of Massachusetts.

The REPUBLICAN has four editors, including Samuel Bowles and J. G. Holland, and while independent in all its discussions, is heartily in sympathy with the political reforms proposed by the great national Fremont movement of 1856.

Now is the time to make up clubs and subscribe. Single copies $1.50 a year; 10 copies to one address $12,50; 20 copies $20, and the same rate for larger numbers.

The REPUBLICAN is mailed to all parts of New-England early Friday morning, and contains one day's later news than the New-York weeklies of the same (Saturday's) date.

Address SAMUEL BOWLES & COMPANY,
Jan. 1—m1t Springfield, Mass.

DIOSCOREA BATATAS—NEW CHINESE POTATO OR YAM.—The experience of another season in the cultivation of this new esculent, warrants us in confirming all we said in relation to it last year. Wherever it has fallen into the hands of judicious cultivators, and received the care necessary to its full development, the result has been entirely satisfactory in all respects, and it may confidently be reaffirmed, that "of all the esculents proposed as substitutes for the diseased potato, the Dioscorea Batatas is certainly the only important one." We can now supply small roots from 4 to 9 inches long, carefully packed for transport at $3 per dozen; and small seed tubers (such as we sold last season,) at $1 per dozen, or $7 per hundred; these latter can be sent by mail. Description and directions for culture furnished with each package. Where practicable, parties are invited to examine the roots before purchasing.

NEW CHINESE NORTHERN SUGAR CANE.—We can supply seeds of this celebrated invaluable plant in packets at 12½ cents each, or 75 cents per pound in quantity.

Also, CHUFAS or EARTH ALMONDS, NEW ORANGE WATER-MELON, KING PHILIP CORN, &c., with the largest and most comprehensive assortment of VEGETABLE, FLOWER, and FIELD SEEDS to be found in the United States.

J. M. THORBURN & CO., Seedsmen, &c.,
Dec. 18—w4tm1t. No. 15 John-st., New-York.

THE NEW-YORK OBSERVER,

A Religious and Secular Family Newspaper, will commence on the 1st of January next its Thirty-fifth Volume.

It is the Largest Newspaper in the World,

Published Weekly, and devoted to Religious, Literary and Secular Intelligence of every variety. Its Mammoth Sheet is so arranged as to constitute

TWO COMPLETE NEWSPAPERS;

The one Religious and the other Secular, each of which is larger than a majority of its cotemporaries—
and unlike them also,

It is not sectarian in Religion, nor partisan in Politics.

But designed for a pleasing and instructive companion in every Evangelical Christian Family.

A large number of the best writers of the age as special Contributors, and Correspondents in all the principal Countries of the World, are united with a full Editorial Corps of long experience, to give interest and value to the paper.

THE RELIGIOUS DEPARTMENT,

Besides its Editorial Articles and Correspondence, contains a Summary of the most important movements of all CHRISTIAN DENOMINATIONS.

THE SECULAR SHEET,

In addition to the Foreign and Domestic News, has departments of Agriculture, of Science, and of Commerce—the latter embracing full and accurate Reports of the Money, Produce, Cattle and other Markets up to the time of going to press.

The Conductors of the Observer will spare no expense or effort to maintain for their Journal the high reputation it has always possessed. No Journal ever retained for the same time so large and so permanent a list of Subscribers as the New-York Observer. It has several times passed the ordeal of party and sectional strife, Religious and Secular, with little or no variation in the list of its subscribers. Of those who have left it in the excitement of the moment many have returned again, unsatisfied with controversial and party organs as a substitute.

It has attained its large circulation MAINLY BY VOLUNTARY SUBSCRIPTIONS and the kind agency of its subscribers.

Specimen numbers of the Paper will be sent free to all applicants. A copy of our Bible Atlas, with colored Maps on paper of large size and best quality, will be sent gratis to every person who pays for a year in advance.

WILL EVERY READER seek to obtain one or more Subscribers to commence on the first of January next with the volume? Many who have made an earnest effort have sent us a dozen or twenty as the fruit of a few hours' labor.

The price of the Observer is $2.50 a year IN ADVANCE. One Dollar and Fifty Cents will be deducted AS COMMISSION from the price of THREE NEW SUBSCRIBERS sent us at one time; OR ANY OLD SUBSCRIBER, sending us the name of TWO NEW SUBSCRIBERS and Six Dollars, shall have receipts for the three subscriptions, for one year, provided his own is paid in advance.

A MORE LIBERAL commission will be paid to any one who will send us twenty or more new subscribers.

Address **SIDNEY E. MORSE & CO.,**
Editors & Proprietors,
Dec, 11—w3tm1t 138 Nassau-st., New-York.

Suffolk Pigs for Sale.

I HAVE now for sale twenty-three thorough-bred Suffolk Pigs—four litters from one to six weeks old, that will pair well for breeding.

Prices, well boxed and shipped as freight or by express,
6 to 9 weeks old, $25 per pair or $15 single.
9 " 12 " 30 " 20 "

Catalogues containing full pedigrees will be forwarded upon application to THOS. GOULD,
Nov. 27—w3tm1t Aurora, Cayuga Co., N. Y.

THE HORTICULTURIST,

AND

Journal of Rural Art and Rural Taste.

COMMENCED BY A. J. DOWNING,
Author of "Landscape Gardening," "Designs for Cottage Residences," "Fruit and Fruit Trees of America," "Country Houses," etc.

EDITED BY J. JAY SMITH, EDITOR OF THE NORTH-AMERICAN SYLVA.

THIS popular publication, which is gradually extending its influence throughout the country, and is becoming indispensable to the tasteful Gardener, the Fruit Culturist, and the Floriculturist, will be continued under the editorship of J. JAY SMITH, whose ability and taste in matters of country life are highly appreciated through the country.

The cultivation of the beautiful, both in Nature and Art, is justly esteemed an important element in education, and recommends itself to the attention of all who wish to make their dwelling and grounds attractive, and to surround themselves with those luxuries and adornments that spring from the fruitful bosom of the earth when cultivated by the practical hand. The typographical execution of the HORTICULTURIST is designed to be an index to its contents—neat, chaste, and elegant. It embraces within its scope—

I. THE DESCRIPTION AND CULTIVATION OF FRUIT AND FRUIT TREES—a subject of vast importance, and in which we are already more interested than any other people.

II. THE DESCRIPTION AND CULTIVATION OF FLOWERS AND FLOWERING PLANTS AND SHRUBS, from the most delicate and tender to the most hardy and robust.

III. TO THE DESCRIPTION AND CULTIVATION OF ALL EDIBLE PLANTS, which are, or should be, grown in our gardens.

IV. TO GARDENING AS AN ART OF TASTE—with Designs for Ornamental or Landscape Gardening.

V. TO RURAL ARCHITECTURE—embracing Designs for Rural Cottages and Villas, Farm Houses, Lodges, Gates, Vineries, Ice Houses, etc., etc.

VI. TO ARBORICULTURE—or the Planting and Culture of Forest and Ornamental Trees.

VII. TO BOTANY AND ENTOMOLOGY—so far as these branches are connected with the general subjects to which the work is specially devoted.

The extended and valuable correspondence of THE HORTICULTURIST presents the experience of the most intelligent cultivators in America: the superior illustrations, and the instructive and agreeable articles from the pens of the editor and contributors, make it eagerly sought after by even the general reader interested in country life. To all persons alive to the improvement of their gardens, orchards, or country seats—to scientific and practical cultivators of the soil—*to nurserymen and commercial gardeners*, this Journal, giving the latest discoveries and improvements, experiments and acquisitions in Horticulture and those branches of knowledge connected with it, will be invaluable.

A NEW VOLUME (12th year) commences with the January number for 1857; and it will be the constant aim of the editor and the publisher, by every means in their power, to render it still more worthy, by every practicable improvement, of the liberal patronage it is receiving.

The work is issued on the first of each month, in the best style of the periodical press, each number containing 48 pages, embellished with a frontispiece and several other original and well-executed engravings. At the end of the year it will make a volume of *six hundred* pages, beautifully illustrated with over one hundred engravings, many of them drawings of fruit and flowers from nature. These volumes, if taken for a number of years, will make a valuable Encyclopedia of Horticultural Literature.

TERMS—Two Dollars a year.

An edition is published with plates colored in the best style of the art—Price $5.

☞ Subscriptions must be addressed to the Agents,
Or to ROBERT PEARSALL SMITH,
17 & 19 Minor-st., Philadelphia, Pa.

Specimens sent on application, inclosing P. O. stamps.
Dec. 4—w3tm1t

TO BEE-KEEPERS.

M. QUINBY, the most extensive Bee-keeper of the age, will send his "MYSTERIES OF BEE-KEEPING EXPLAINED," TO ANY ADDRESS FOR ONE DOLLAR, FREE OF POSTAGE. Address
M. QUINBY,
Nov. 27—w3tm1t* St. Johnsville, Montgomery Co., N. Y

Suffolk Pigs and Brahma Fowls.

MY SUFFOLK BOAR "PRINCE ALBERT," 16 months old, is for sale—he is a *fine animal*. I shall have a few pairs of pigs of his get for sale soon—price $12 to $15 the pair at 10 weeks old. Also a few pairs or trios of *Brahma Fowls*. Give me a call. E. G. COOKE,
Nov. 13—w2tm2t* Belleville, Jefferson Co., N. Y.

The Horse, Most Noble Animal.

THAT indefatiguable laborer in behalf of true Veterinary Science, Dr. GEORGE H. DADD, has in press to be published by us during the winter, the most superb work on the Horse ever published in the world, entitled

The Anatomy and Physiology of the Horse.

In one large octavo vol. of 300 pages. Illustrated with 20 superb Anatomical Plates of the Horse, from a great French work.

Price with colored plates, ...$4
do uncolored do. 2

Orders for this elegant and valuable work in advance of publication, are solicited by the Publishers.

Also, just published, the Eleventh Thousand of

The Modern Horse Doctor, by Dr. George. H. Dadd.

Undoubtedly the best work ever issued from the American press on THE CAUSES, NATURE AND TREATMENT OF DISEASES AND LAMENESS IN HORSES. Price $1. Every man who owns a Horse, should own this book.

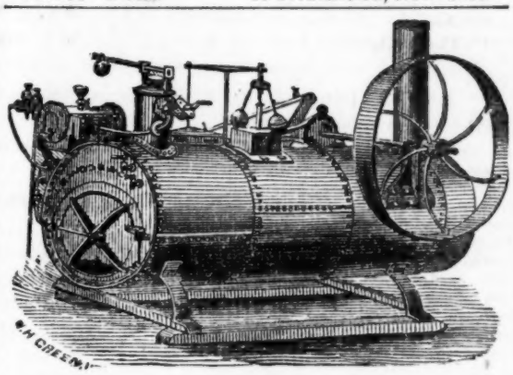
JOHN P. JEWETT & CO., Publishers.
Oct. 30—w&m4t 117 Washington-street, Boston.

NO. 1 PERUVIAN GUANO,

AT THE lowest market price.
Superphosphate of Lime,
Poudrette, manufactured by the Lodi Manufacturing Co,
Plaster for Land purposes,
Charcoal Dust for Land purposes,
Bone Dust, Sawings, Turnings and Ground Bone,
Can now be obtained in large or small quantities at the

North River Agricultural Warehouse,

GRIFFING BROTHER & CO.,
Feb. 14—w&mtf 60 Cortlandt-St., New-York.



PORTABLE STEAM ENGINES,

For Farm and Mechanical Purposes.

A. N. WOOD & CO., Eaton, Madison Co., N. Y., are building, and keep on hand Portable Engines of different sizes, on Trucks or without.

PRESENT LIST OF PRICES.		*Weight.*
2½ horse power,	$225	1500
3 ..... do	$275	1800
4 ..... do	$340	2000
6 ..... do	$520	3500
8 ..... do	$680	4500
10 ..... do	$850	6000

Trucks with cast iron wheels, from $20 to $50 extra, ready to hitch the team on.

Circulars can be had by addressing us as above.
Jan. 31—wtf—May 22—mtf A. N. WOOD & CO.

PROSPECTUS FOR 1857.

THE SATURDAY EVENING POST.

ESTABLISHED AUGUST 4th, 1821.

The publishers of this old and firmly established paper take pleasure in calling the attention of the public to their programme for the coming year. Surfeited with politics, the claims of Literature will be more than ever appreciated by the reading world. We have therefore already made arrangements with the following brilliant list of writers :—

WILLIAM HOWITT, (*of England,*) ALICE CARY, T. S. ARTHUR, MRS. SOUTHWORTH, AUGUSTINE DUGANNE, MRS. M. A. DENISON, *the Author of "ZILLAH," &c., &c.*

We design commencing, in the first number in January next, the following original novelet :—

TALLENGETTA,
OR
THE SQUATTER'S HOME.

By WILLIAM HOWITT, author of "Rural Life in England," "Homes of the Poets," &c., &c.

This is a STORY OF AUSTRALIAN LIFE, Mr. Howitt having visited Australia expressly with the object of acquainting himself with the novel and romantic aspects under which nature and society present themselves in that singular region.

The following Novelets will then be given, though probably not in the exact order here mentioned :—

THE STORY OF A COUNTRY GIRL.

By ALICE CARY. An original Novelet, written expressly for the Post.

THE WITHERED HEART.

An Original Novelet, written expressly for the Post, by T. S. ARTHUR.

LIGHTHOUSE ISLAND.

An Original Novelet, by the author of "MY CONFESSION," "ZILLAH, OR THE CHILD MEDIUM," &c.

THE QUAKER'S PROTEGE.

An Original Novelet, by MRS. MARY A. DENISON, author of "MARK, THE SEXTON," "HOME PICTURES," &c.

AN ORIGINAL NOVELET,

By AUGUSTINE DUGANNE, author of "THE LOST OF THE WILDERNESS," &c., is also in course of preparation for the Post.

We have also the promise of a SHORT AND CONDENSED

NOVELET by MRS. SOUTHWORTH,

to run through about six or eight numbers of the Post.

☞ In addition to the above list of contributions, we design continuing the usual amount of FOREIGN LETTERS, ORIGINAL SKETCHES, CHOICE SELECTIONS from all sources, AGRICULTURAL ARTICLES, GENERAL NEWS, HUMOROUS ANECDOTES, View of the PRODUCE AND STOCK MARKETS, THE PHILADELPHIA RETAIL MARKETS, BANK NOTE LIST, EDITORIALS, &c., our object being to give a Complete Record, as far as our limits will admit, of the Great World.

ENGRAVINGS.—In the way of Engravings, we generally present two weekly—one of an instructive, and the other of a humorous character.

The Postage on the Post to any part of the United States, paid quarterly in advance, at the office where it is received, is only 26 cents a year.

TERMS (Cash in advance)—Single Copy $2 a year.

4	COPIES	$ 5 00	a year.
8	" (And one to the getter up of the Club,)	10 00	"
13	" (And one to the getter up of the Club,)	15 00	"
20	" (And one to the getter up of the Club,)	20 00	"

Address, *always postpaid,*

DEACON & PETERSON,

No. 66 SOUTH THIRD STREET, PHILADELPHIA.

☞ **SAMPLE NUMBERS sent gratis to any one, when requested.**

☞ TO EDITORS.—Editors who give the above one insertion, or condense the material portions of it, (the notices of new contributions and our terms,) for their *editorial* columns, shall be *entitled* to an exchange, by sending us a marked copy of the paper containing the advertisement or notice. Dec. 1—weow2tm2t

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Improved Short-Horns for Sale.

THE Herd of the subscriber being too large for the size of his farm, he wishes to dispose of four very superior cows, all got by imported bulls, and five heifer calves got by imported Bates' bull Lord Ducie (13,181) out of some of his best cows. Also roan bull calf Beaufort got by Lord Ducie (13,181) out of Daisy 7th by Duke, 444 A. H. B., &c., &c. The cows for sale are very superior milkers, as are also the dams of the calves. Direct DR. HERMAN WENDELL,
Oct. 30—w&mtf Albany, N. Y.

PURE BRED STOCK

FOR SALE—Thorough Bred Durham Cattle, Pure Bred Spanish Sheep, French Sheep, Suffolk Pigs and Essex Pigs. Apply to J. S. GOE, Tippecanoe, 4½ miles east of Brownsville, Fayette Co., Pa. Jan. 1—w&m1y*

Devon Cows,

HEIFERS, and Bull Calves—pure blood—for sale by
Feb. 1—m1y. B. V. FRENCH, Braintree, Mass.

GODEY'S GREATEST EFFORT.

STILL GREATER ATTRACTIONS

WILL BE OFFERED IN

GODEY'S LADY'S BOOK FOR 1857.

This work has been the standard for *twenty-seven* years. When an imitation has been attempted it has failed. It is

THE ONLY LADY'S BOOK

PUBLISHED IN AMERICA.

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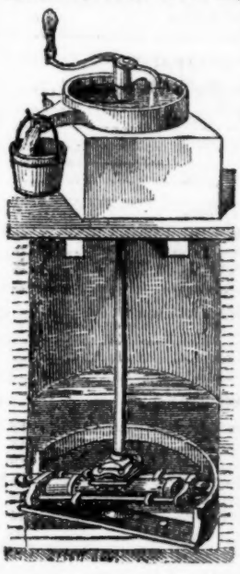

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